

UPDATE ON THE CORPORATE AVERAGE FUEL
ECONOMY PROGRAM (CAFE) AND GREENHOUSE
GAS EMISSIONS STANDARDS FOR MOTOR VEHICLES

JOINT HEARING
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENT
AND THE
SUBCOMMITTEE ON DIGITAL COMMERCE AND
CONSUMER PROTECTION
OF THE
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COMMERCE
HOUSE OF REPRESENTATIVES
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UPDATE ON THE CORPORATE AVERAGE FUEL ECONOMY PROGRAM (CAFE) AND GREEN- HOUSE GAS EMISSIONS STANDARDS FOR MOTOR VEHICLES

TUESDAY, DECEMBER 12, 2017

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT
JOINT WITH THE
SUBCOMMITTEE ON DIGITAL COMMERCE AND CONSUMER
PROTECTION,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:04 a.m., in room 2123, Rayburn House Office Building, Hon. Robert Latta (chairman of the Subcommittee on Digital Commerce and Consumer Protection) presiding.

Members present: Latta, Shimkus, McKinley, Kinzinger, Barton, Upton, Blackburn, Harper, Lance, Olson, Bilirakis, Johnson, Bucshon, Flores, Mullin, Hudson, Cramer, Walberg, Walters, Costello, Carter, Duncan, Walden (ex officio), Schakowsky, Tonko, Green, Matsui, McNerney, Welch, Clarke, Cárdenas, Ruiz, Peters, Dingell, and Pallone (ex officio).

Staff present: Ray Baum, Staff Director; Samantha Bopp, Staff Assistant; Allie Bury, Legislative Clerk, Energy/Environment; Kelly Collins, Staff Assistant; Wyatt Ellertson, Professional Staff Member; Melissa Froelich, Chief Counsel, Digital Commerce and Consumer Protection; Adam Fromm, Director of Outreach and Coalitions; Jordan Haverly, Policy Coordinator, Environment; Paul Jackson, Professional Staff Member, Digital Commerce and Consumer Protection; A.T. Johnston, Senior Policy Advisor, Energy; Bijan Koohmaraie, Counsel, Digital Commerce and Consumer Protection; Ben Lieberman, Senior Counsel, Energy; Mary Martin, Chief Counsel, Energy/Environment; Katie McKeogh, Press Assistant; Mark Ratner, Policy Coordinator; Madeline Vey, Policy Coordinator, Digital Commerce and Consumer Protection; Everett Winnick, Director of Information Technology; Andy Zach, Senior Professional Staff Member, Environment; Greg Zerzan, Counsel, Digital Commerce and Consumer Protection; Michelle Ash, Minority Chief Counsel, Digital Commerce and Consumer Protection; Jeff Carroll, Minority Staff Director; Jean Fruci, Minority Policy Advisor, Energy and Environment; Lisa Goldman, Minority Counsel; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and

Environment; Caroline Paris-Behr, Minority Policy Analyst; Alexander Ratner, Minority Policy Analyst; and C.J. Young, Minority Press Secretary.

Mr. LATTA. Well, good morning. The joint subcommittee will now come to order. The Chair now recognizes himself for 5 minutes for an opening statement.

**OPENING STATEMENT OF HON. ROBERT E. LATTA, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO**

Good morning. I would like to thank our witnesses for being with us this morning. Today we are here to discuss with stakeholders the Corporate Average Fuel Economy Program, or CAFE, at the National Highway Transportation Safety Administration, NHTSA, and the greenhouse gas emissions standards at the U.S. EPA agency that govern fuel economy standards.

NHTSA's CAFE program was established by Congress in 1975. The goals of the program are to improve vehicle fuel economy, reduce oil consumption, and secure the Nation's energy independence.

The CAFE program has undergone major changes and modifications in the past four decades, both because of political and economic forces.

Less than 10 years ago, and on top of the CAFE program, the EPA standards were created to incentivize the production of more efficient vehicles that will use less fuel and emit less carbon dioxide.

In addition, various States have enacted their own standards with respect to automobile emissions. The combinations of these requirements has created an incredibly complicated regulatory scheme.

Improving fuel efficiency and achieving energy independence are important goals. That said, real-world facts and data must drive regulatory decisions that impact such an important and far-reaching part of the American economy and consumers' daily lives.

The previous administration announced an attempt to create a national standard which included a plan for NHTSA and EPA to work together to avoid conflicting regulations.

Whatever progress had been made on that front was undone, however, when earlier this year EPA issued its final determination that the standards for model year 2022 and 2025 are appropriate.

EPA took this action without coordinating with NHTSA, clearly undermining their earlier pledge. The result is that automobile makers potentially found themselves in a position where they are in compliance with one Federal program but out of compliance and subject to penalty with another.

This type of fragmented regulation harms our economy, our workers, and our consumers. The automobile industry is a huge source of American jobs, including nearly 100,000 Ohioans.

A hallmark of the American automobile industry has been the ability to innovate and build cars that American drivers want to buy. But outdated, conflicting, or impossible-to-meet Government regulations get in the way of this type of innovation.

It is a rare event, to say the least, for policymakers in Washington to have better ideas about how to meet consumer demand than consumers themselves.

All too often, Washington stands in the way, particularly when it creates unnecessary confusion with conflicting rules.

My constituents know what type of vehicles work best for their family and their budget. That may change over time, and each American family should be able to make their own choice without the Federal Government putting an extra strain on their finances.

Also, there is a real risk that the costs associated with duplicative Federal and State fuel economy standards could force families to choose older cars without the benefits of new safety technologies.

NHTSA's safety mission and statutory obligations must remain its guiding principle. When we are just starting to turn the corner after many challenging years, it is disheartening, but not surprising, to see the EPA rush out a final determination in the waning hours of the last administration.

I am interested in hearing from our witnesses about industry's experience attempting to navigate this tricky regulatory terrain and what can be done to help support choice for American consumers and jobs across the country.

Again, I want to thank our witnesses for being here, and I yield at this time to the gentlelady from Tennessee.

[The prepared statement of Mr. Latta follows:]

PREPARED STATEMENT OF HON. ROBERT E. LATTA

Good morning, I would like to thank our witnesses for being here this morning. Today we are here to discuss with stakeholders the Corporate Average Fuel Economy Program, or CAFE, at the National Highway Transportation Safety Administration (NHTSA), and the Greenhouse Gas Emissions Standards at the U.S. Environmental Protection Agency (EPA) that govern fuel economy standards.

NHTSA's CAFE program was established by Congress in 1975. The goals of the program are to improve vehicle fuel economy, reduce oil consumption, and secure the Nation's energy independence. The CAFE program has undergone major changes and modifications in the past four decades—both because of political and economic forces.

Less than 10 years ago, and on top of the CAFE program, the EPA standards were created to incentivize the production of more efficient vehicles that will use less fuel and emit less carbon dioxide. In addition, various States have enacted their own standards with respect to automobile emissions.

The combination of these requirements has created an incredibly complicated regulatory scheme. Improving fuel efficiency and achieving energy independence are important goals. That said, real world facts and data must drive regulatory decisions that impact such an important and far-reaching part of the American economy and consumers' daily lives.

The previous administration announced an attempt to create a national standard which included a plan for NHTSA and EPA to work together to avoid conflicting regulations. Whatever progress had been made on that front was undone, however, when earlier this year the EPA issued its Final Determination that the standards for model year 2022–2025 are appropriate. EPA took this action without coordinating with NHTSA, clearly undermining the earlier pledge.

The result is that automakers potentially find themselves in a position where they are in compliance with one Federal program, but out of compliance and subject to penalties with another's.

This type of fragmented regulation harms our economy, our workers and consumers. The automotive industry is a huge source of American jobs including nearly 100,000 Ohioans.¹

A hallmark of the American automotive industry has been the ability to innovate and build cars that American drivers want to buy.

But outdated, conflicting or impossible-to-meet Government regulations get in the way of this type of innovation. It is a rare event, to say the least, for policymakers in Washington to have better ideas about how to meet consumer demand than consumer themselves. All too often Washington stands in the way, particularly when it creates unnecessary confusion with conflicting rules.

My constituents know what type of vehicle works best for their family and their budget. That may change over time and each American family should be able to make their own choice without the Federal Government putting extra strain on their finances. Also, there is a real risk that the costs associated with duplicative Federal and State fuel economy standards could force families to choose older cars without the benefits of new safety technologies. NHTSA's safety mission and statutory obligations must remain its guiding principle.

When we are just starting to turn the corner after many challenging years, it is disheartening, but not surprising, to see the EPA rush out a Final Determination in the waning hours of the last administration.

I am interested in hearing from the witnesses about industry's experience attempting to navigate this tricky regulatory terrain, and what can be done to help support choice for American consumers and jobs across the country.

Thank you for being here today and I look forward to hearing your testimony.

Mrs. BLACKBURN. Thank you, Mr. Chairman, and I appreciate so much that you and Chairman Shimkus have called this hearing.

Studies have shown that the higher purchase price of cars under a stricter CAFE under these 2025 standards would eliminate a lot of consumers from buying new cars.

There is between 3.1 and 14.9 million American consumers that would fall out of the new-car marketplace. Now, this is where there is a tension and a friction that we need to talk about: When is something counterproductive?

And, of course, in Tennessee we have a lot of auto manufacturers. This is what they tell me: Whether they are with Nissan or Toyota or Volkswagen or GM, it does not matter. They want realistic standards. They want something that will—they will be able to meet the expectation of American consumers and deliver a product that is, first of all, safe and that consumers are going to be safe in these automobiles.

So I thank the chairman for the hearing. I think this is time for us to talk about what is realistic, what is achievable, and what will deliver a safe product for the American consumer, and I yield back.

Mr. LATTA. Thank you very much. The gentlelady yields back.

The Chair now recognizes the subcommittee ranking member, the gentlelady from Illinois, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. JANICE D. SCHAKOWSKY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Ms. SCHAKOWSKY. Thank you, Mr. Chairman.

CAFE and greenhouse gas emission standards have been critical tools to improve fuel economy and reduce carbon pollution.

The CAFE program was born out of the energy crisis in the 1970s. Now those standards are helping us address the even greater threat of a changing climate.

Strong standards have a more immediate consequence for American consumers: big savings at the pump. In the midterm evaluation finalized in January, the Environmental Protection Agency estimated that the model year 2022 to 2025 greenhouse gas emission standards will save consumers \$92 billion over the lifetime of their

vehicle—obviously, not each one, together \$92 billion. Industry has criticized the standards for 2022 to 2025 as too costly. That criticism is not supported by the facts.

The EPA found that meeting the standards is not only technologically feasible but also cheaper than expected. In fact, the cost estimate per vehicle has gone down over \$200 since 2012.

Ambitious standards have driven innovation, which has, in turn, lowered costs. The last time we held this hearing in September of 2016, John German of the International Council on Clean Transportation testified, quote, “During the course of my 40-year career, initial cost estimates for complying with emissions and efficiency requirements have consistently been overstated, not some of the time or even most of the time, but all of the time.”

Nevertheless, the standards face resistance. I often hear companies call for greater regulatory certainty and more time to comply with the rules. But this time, the EPA actually finished its work ahead of schedule.”

So what did the automakers do? Petition for a redo, and the Trump administration was all too happy to comply. No matter how EPA Administrator Scott Pruitt or others want to explain the decision to reopen the midterm evaluation, the end result is clear: dirtier, less efficient vehicles.

Calls for harmonization between CAFE and greenhouse gas standards are just further efforts to weaken the standards.

I am especially confused why the auto industry would be so opposed to strong standards when the automakers are promising fleets of energy-efficient autonomous vehicles.

If AVs are actually going to be electric vehicles, I would think compliance should be easy. As we discuss the future of these standards, family budgets and public health hangs in the balance. This is not the time to ignore facts under the industry pressure.

We need to continue the progress toward greater fuel efficiency and lower greenhouse gas emissions.

And I now yield to Congresswoman Matsui.

Ms. MATSUI. Thank you very much, Ranking Member Schakowsky.

NHTSA’s CAFE standards and the EPA’s greenhouse gas emission standards for light-duty vehicles are win-win. They are good for consumers who save billions of dollars at the pump over the lifetime of their vehicles.

They are good for the environment. The standards significantly reduce emissions for the transportation sector, the only sector in which energy efficiency has grown worse over the past 15 years in this country.

And they are good for the American workers. They spark the development of innovative technologies that create profits and support jobs.

Many companies understand this and support the NHTSA and EPA standards. Even those companies critical of the standards are shifting to efficient engines and electric vehicles in response to consumer demand for cleaner cars.

In light of the widespread support for improving fuel economy, I am disappointed with the Trump administration’s decision to revisit the standards for model years 2022 to 2025.

It is clear the administration is simply intent on weakening the progress we have made so far. That is why I will be introducing a bill to codify the NHTSA and EPA standards. These standards are written in 2012 with the support of the auto industry, environmental groups, and States.

My legislation maintains the Federal Government and auto manufacturers' promise to American people, a promise for cleaner and efficient cars that cost less at the pump and that are better for the environment, health, and the future of our children and grandchildren.

I look forward to continuing to engage with the committee on this issue. Thank you, and I yield back.

Mr. LATTA. Thank you. The gentlelady yields back, and the Chair now recognizes the chairman of the Environment Subcommittee, the gentleman from Illinois, for 5 minutes for an opening statement.

Mr. SHIMKUS. Mr. Chairman, before I do my opening statement, I get 15 seconds for a point of personal privilege?

Thank you. Two pictures I want to identify for folks—you will all appreciate this. This is a tweet I got from my colleague from Texas, who is not paying attention, talking about the next streak, and then the next photo will—if you put that up—that's actually what—Mr. Olson, are you paying attention?

Mr. OLSON. Yes.

Mr. SHIMKUS. So I thank you for correcting the record and starting a new streak.

Mr. OLSON. For the second time in 16 years.

Mr. SHIMKUS. I would just—we saw your tweet earlier, so—I know my colleagues because of Mr. Olson and how he acts, and we appreciate that. So thank you very much.

Mr. LATTA. The gentleman is recognized.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. One of the costs of this energy and environmental regulation from the Obama administration is the one we will address today that targets fuel efficiency and greenhouse gas emissions for cars and light trucks.

EPA estimated total cost in excess of \$200 billion by 2025, much of which will show up in the form of higher sticker prices for new vehicles.

And although the agency claims offsetting consumer savings from lower fuel costs, we now know that this was based upon inaccurate projections of rising gas prices as well as other assumptions that are proving to be off the mark.

It is time to review these rules to see if they are a good deal for consumers or whether they can be improved upon. Fortunately, regulations contain just such a review, the so-called midterm evaluation.

The regulations were finalized in 2012 and included progressively stricter standards all the way out to 2025, more than a decade into the future.

For this reason, it was decided to revisit the standards midway through the process to see if standards for model years 2022 to 2025 need to be adjusted in light of changed circumstances.

In 2016, EPA commenced its midterm evaluation and was poised to make a final determination by April 2018. But after the elections, EPA accelerated its time line and rushed the final determination out the door last January.

This determination concluded that standards are fine as they are and don't need to be changed. The good news is that Administrator Pruitt found this process to be completely unacceptable and has reopened the midterm evaluation with the original deadline of April 2018, after which the agency may proceed to a rulemaking to change the targets for 2022 through 2025.

Part of this hearing is to get input from those who make cars and trucks as well as those who sell them about their contributions to the midterm evaluation and what they would like to see come out of the process.

The stakes are high for automakers and auto dealers. But they are higher still for consumers. The average price of a new vehicle has risen to \$35,000 in 2017. These regulations are a contributor to the increase.

EPA estimated cumulative price increases of nearly \$3,000 per vehicle by 2025, and the real number may prove to be higher.

Worst of all, the biggest sticker shock may be on the vehicles that matter most to middle America. Granted, a Toyota Prius or a Smart car may be fine for some people, but many of my constituents need family-size vehicles or pickup trucks for work, and it is these larger vehicles that may take the biggest hit.

We need to make sure that the future targets under this program maintain vehicle choice and affordability.

In addition to the midterm evaluation, we also need to evaluate whether we have a uniform set of rules for the Nation.

Recall that since the 1970s the National Highway Traffic Safety Administration, or NHTSA, had exclusive authority to set vehicle fuel economy standards.

But the Obama administration decided that the EPA and the California Air Resources Board should do so as well. So now we have three agencies all regulating the same thing, and, not surprisingly, there are discrepancies emerging.

Looking ahead, we need to ask whether we still want three agencies involved in the fuel economy and why we gave California so much more power than any other State in the Union.

It all comes down to what is best for the consumer. Vehicle purchases are second only to home purchases in terms of their consumer impact, and I hope this hearing helps us strengthen our understanding of what we need to do to make these regulations as consumer friendly as possible.

Thank you, Mr. Chairman, and I yield back the balance of my time.

[The prepared statement of Mr. Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS

One of the costliest energy and environmental regulations from the Obama administration is the one we will address today that targets fuel efficiency and green-

house gas emissions from cars and light trucks. EPA estimated total costs in excess of \$200 billion by 2025, much of which will show up in the form of higher sticker prices for new vehicles. And although the agency claims offsetting consumer savings from lower fuel costs, we now know that this was based on inaccurate projections of rising gas prices as well as other assumptions that are proving to be off the mark. It is time to review these rules to see if they are a good deal for consumers and whether they can be improved upon.

Fortunately, the regulations contained just such a review—the so-called midterm evaluation. The regulations were finalized in 2012 and included progressively stricter standards all the way out to 2025—more than a decade into the future. For this reason, it was decided to revisit the standards midway through the process to see if the standards for model years 2022–2025 need to be adjusted in light of changed circumstances. In 2016 EPA commenced its midterm evaluation and was poised to make a final determination by April of 2018.

But after the elections, EPA accelerated its timeline and rushed the final determination out the door last January. This determination concluded that the standards are fine as they are and don't need to be changed.

The good news is that Administrator Pruitt found this process to be completely unacceptable and has reopened the midterm evaluation with the original deadline of April of 2018, after which the agency may proceed to a rulemaking to change the targets for 2022–2025.

Part of this hearing is to get input from those who make cars and trucks as well as those who sell them about their contributions to the midterm evaluation and what they would like to see come out of this process.

The stakes are high for auto makers and auto dealers, but they are higher still for consumers. The average price of a new vehicle has risen to \$35,000 in 2017, and these regulations are a contributor to the increase. EPA estimated cumulative price increases of nearly \$3,000 per vehicle by 2025, and the real number may prove to be higher.

Worst of all, the biggest sticker shock may be on the vehicles that matter most to Middle America. Granted, a Toyota Prius or a Smart car may be fine for some people, but many of my constituents need family-sized vehicles or pickup trucks for work, and it's these larger vehicles that may take the biggest hit. We need to make sure that the future targets under this program maintain vehicle choice and affordability.

In addition to the midterm evaluation, we also need to evaluate whether we have a uniform set of rules for the Nation. Recall that since the 1970s the National Highway Traffic Safety Administration (NHTSA) had exclusive authority to set vehicle fuel economy standards, but the Obama administration decided that EPA and the California Air Resources Board should do so as well. So now we have three agencies all regulating the same thing and not surprisingly there are discrepancies emerging. Looking ahead, we need to ask whether we still want three agencies involved in fuel economy and why we gave California so much more power than any other State.

In conclusion, it all comes down to what is best for the consumer. Vehicle purchases are second only to home purchases in terms of their consumer impact, and I hope this hearing helps us strengthen our understanding of what we need to do to make these regulations as consumer-friendly as possible. Thank you.

Mr. LATTI. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the Environment Subcommittee ranking member, the gentleman from New York, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you, and thank you to our witnesses. Thank you, Chair Latta, Chair Shimkus for holding today's hearing.

NHTSA's Corporate Average Fuel Economy, or CAFE, standards and EPA's greenhouse gas emissions standards have played a critical role in saving consumers money at the pump while reducing carbon pollution.

CAFE standards were established in 1975 by the Energy Policy and Conservation Act to reduce our Nation's reliance on foreign oil,

and since 2009, EPA's greenhouse gas emissions standards have become increasingly important in our Nation's efforts to address climate change.

Last year, transportation surpassed the electricity sector as the largest source of greenhouse gas emissions in our country. According to the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks, light-duty vehicles accounted for nearly 60 percent of the United States transportation emissions and approximately 16.5 percent of total domestic emissions in 2015.

No serious effort to reduce emissions can ignore emissions from light-duty vehicles. The current standards are estimated to lead to the reduction of carbon emissions by 6 billion metric tons for vehicles within model years 2012 through 2025.

In addition to the pollution reduction, CAFE standards are estimated to save consumers some \$1.7 trillion at the pump from vehicles produced between 2011 and 2025.

Improving vehicle efficiency has truly been a win-win outcome. We have come a long way since the 1930s. Over the past four decades, the Federal fuel economy program has evolved considerably to give automakers significantly greater flexibility.

Today, manufacturers are not forced into a single compliance path. Each manufacturer has its own fleetwide standard that reflects the vehicles it produces to meet its customers' demands.

But in the 15 months since our last hearing on this subject, we have seen major changes at EPA. As part of the 2012 agreement between President Obama and the auto industry, EPA agreed to conduct a midterm evaluation to determine whether assumptions made about technology development and costs in 2012 were still accurate and still reasonable.

Last summer, EPA began its midterm review. The agency examined a wide range of factors and built an extensive public record on the appropriateness of greenhouse gas standards for model years 2022 through 2025 vehicles.

Along with the NHTSA and the California Air Resources Board, EPA issued the July 2016 draft technical assessment report and sought public comment.

EPA also sought public comment on the proposed determination that the greenhouse gas standards for model years 2022 through 2025 vehicles remain appropriate.

The technical assessment and ensuing comments provide a robust and conclusive record. EPA standards are feasible and can be met at lower costs than originally estimated.

EPA's current estimate is an average per-vehicle cost of \$875 to meet these standards. This estimate is lower than the initial estimate of \$1,100 per vehicle, which EPA found reasonable in its 2012 rule and much lower than consumers can expect to save at the pump over the life of the vehicle.

In January, former EPA Administrator Gina McCarthy issued a final determination that the targets should remain in place up to 2025.

I believe that was the correct decision. But despite the extensive record established by EPA, in March Administrator Pruitt announced his decision to reopen the midterm review. Weakening

these standards would be bad for consumers, the environment, and, certainly, American competitiveness.

I have tremendous faith in America's manufacturers. There is no doubt they will continue to be able to meet these achievable goals.

In fact, the evidence is clear that technology adoption rates have occurred more quickly than EPA's initial expectation.

Last year, former EPA Acting Assistant Administrator Janet McCabe testified before this committee that there are more than 100 individual model year 2016 vehicle versions already meeting model year 2020 standards or later.

As automakers continue to innovate, it is clear that multiple technology pathways, including existing off-the-shelf technologies, will allow them to achieve existing model years 2022 through 2025 standards, particularly given the flexibility of the program.

So thank you again to the chairs for today's joint hearing and thank you to our witnesses for being here. These are incredibly important programs for the sake of our constituents' wallets and our Nation's efforts to reduce pollution.

With that, I yield back.

Mr. LATTA. Thank you. The gentleman yields back.

The Chair now recognizes the chairman of the full committee, the gentleman from Oregon, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. I thank the chairman.

Good morning, everyone. Today's hearing touches on a prominent point of frustration for many Americans, and that's the duplicative Government programs that increase costs and decrease choices for consumers.

Specifically, we are talking about the differing fuel economy standards under programs administered by the National Highway Traffic Safety Administration and the Environmental Protection Agency.

While NHTSA has been charged with implementing fuel economy standards for motor vehicles since 1978, I believe, the Obama-era EPA developed its own standard under the Clean Air Act in 2009.

So, in order to coordinate these different requirements, the Obama administration created the national program. Unfortunately, the national program has failed in its attempt to develop a single national standard, which causes uncertainty around the multiple policies and creates barriers to innovation and growth.

Under the current scheme, it is possible that automakers will find themselves in full compliance with one Federal regulatory standard but running afoul of another.

This is true even though the previous administration explicitly told this committee during a hearing last Congress that they would work together to avoid this very result.

Since then, we have seen activity that completely undermines the national program and works against the Obama administration's promise of coordinated regulatory efforts.

Under the midterm evaluation schedule, NHTSA and EPA were to jointly issue their respective determinations on the model years 2022 through 2025 standards.

This was supposed to happen in April of 2018. However, the EPA then abandoned this commitment and rushed through its final determination without coordination with the National Highway Traffic Safety Administration just 7 days before President Trump was sworn into office.

I look forward to receiving an update from our witnesses today on how they are dealing with different requirements. We want to know how these different regulatory schemes impact consumers and learn more about better ways to ensure the Federal fuel economy standards are met without creating unnecessary paperwork or administrative burdens that serve only to drive up costs for American families.

As currently constructed, it's been estimated these programs will raise the average price of a new vehicle by almost \$3,000. That's no small amount and one that will undoubtedly price many Americans out of the new car market.

Although the goals of these varying programs are important, we must never forget that we do in Washington have a real impact on consumers across the country.

Government works best when it identifies clear problems and offers clear instructions for how to solve those problems. Federal programs that overlap or conflict do nothing to help protect the American people.

It's our job to ensure that our laws and the implementation of them advance public policy goals, and, if they need correction or clarification, it's what we are here to do.

So I want to thank our witnesses again for participating in our discussions today, and the American people deserve a Government that removes barriers to innovation and growth and avoids unnecessarily driving up costs for consumers.

I look forward to your testimony, and unless any other Member wants the balance of my time, I will return the balance of my time. I yield back.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

Good morning. Today's hearing touches on a prominent point of frustration for many Americans: duplicative Government programs that increase costs and decrease choices for consumers. Specifically, we're talking about the differing fuel economy standards under programs administered by the National Highway Traffic Safety Administration and the Environmental Protection Agency.

While NHTSA has been charged with implementing fuel economy standards for motor vehicles since 1978, the Obama-era EPA developed its own standards under the Clean Air Act in 2009.

In order to coordinate these different requirements, the Obama administration created the National Program. Unfortunately, the program has failed in its attempt to develop a single national standard, causing uncertainty around the multiple policies and creating barriers to innovation and growth.

Under the current scheme it is possible that auto makers will find themselves in full compliance with one Federal regulatory standard, but running afoul of another. This is true even though the previous administration explicitly told this committee during a hearing last Congress that they would work together to avoid this very result.

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Government works best when it identifies clear problems and offers clear instructions for how to solve them. Federal programs that overlap or conflict do nothing to help protect the American people. It is our job to ensure that our laws and the implementation of them advance public policy goals, and if they need correction or clarification, we do so.

I thank our witnesses for appearing before us today to address this important topic. The American people deserve a Government that removes barriers to innovation and growth, and avoids unnecessarily driving up costs for consumers.

I look forward to our witnesses' testimony and I yield back the balance of my time.

Mr. LATTA. The gentleman yields back the balance of his time, and the Chair now recognizes the ranking member of the full committee, the gentleman from New Jersey, for 5 minutes.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

A little over a year ago, the committee held a hearing on the technical assessments report produced by the National Highway Transportation and Safety Administration, the EPA, and the California Air Resources Board, and that report formed the basis for all three agencies' decision in January to move forward with the proposed light-duty vehicle standard for models produced from 2022 to 2025.

Unfortunately, as with many other decisions and regulations needed to improve public health, the environment, and consumer benefits, the Trump administration is moving to weaken these important standards.

The administration complied with a request from the auto industry to reopen the midterm review and reconsider the current greenhouse gas emission target for light-duty vehicles equivalent to 51.4 miles per gallon by model year 2025, and this review could potentially lead to a weakening of the standard.

I believe that if the U.S. oil industry is to remain competitive in the global market, we must reject efforts to move backwards. These targets are critical to reducing greenhouse gas emissions that contribute greatly to the ongoing threat of climate change, and we must meet these goals to reduce harmful emissions that endanger public health.

Air pollution and carbon emissions from the transportation sector are significant in many of the world's urban areas.

The fastest-growing markets for auto are in Asia, especially in India and China. These are the same countries whose large cities experience chronic poor air quality that creates significant public health problems.

Understandably, several countries, including Britain, France, India, and China this year, announced ambitious goals to restrict or eliminate sales of new gas and diesel cars within the next few decades.

And the auto industry claims that it can't meet stricter fuel efficiency and emission reduction goals by 2025. But their efforts to seek harmonization through credits and so-called credit banking will only serve to undermine and erode the laudable goals previously set by the Obama administration.

Meanwhile, the auto industry has already received a sizeable advantage from the Trump administration: an indefinite delay of the civil penalty increases for CAFE violations that were finalized at the end of last year.

Industry must find ways to continue their investment in vehicles that are more fuel efficient, particularly those that don't rely on fossil fuel for power.

The joint standards developed by NHTSA and EPA in conjunction with the State of California are ambitious but, clearly, achievable.

They will deliver tremendous benefits to consumers and make our Nation more energy secure. It will also play a critical role in our effort to slow the pace and severity of climate change, and lowering emissions will improve air quality and public health.

We know that technologies to produce more efficient and less polluting vehicles are available and affordable today. Those vehicles must be produced, and they must be marketed with at least the same level of resources used to market the large, inefficient sport utility vehicles currently being pushed by industry, and there is simply no justification for easing up on this important effort that will benefit the public health, the environment, and American manufacturers who will reap the benefits of our Nation being out front instead of being dragged behind.

I don't know if anybody else wants my time. If not, I'll yield back, Mr. Chairman.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Good morning. A little over a year ago, the committee held a hearing on the Technical Assessment Report (TAR) produced by the National Highway Transportation and Safety Administration (NHTSA), the Environmental Protection Agency (EPA), and the California Air Resources Board (CARB). The report formed the basis for all three agencies' decision in January to move forward with their proposed light duty vehicle standards for models produced between 2022 and 2025.

Unfortunately, as with many other decisions and regulations needed to improve public health, the environment, and consumer benefits, the Trump administration is moving to weaken these important standards. The administration complied with a request from the auto industry to re-open the midterm review and reconsider the current greenhouse gas emission target for light duty vehicles equivalent to 51.4 miles per gallon by model year 2025. This review could potentially lead to a weakening of the standard.

I believe that if the U.S. auto industry is to remain competitive in the global market we must reject efforts to move backwards. These targets are critical to reducing greenhouse gas emissions that contribute greatly to the ongoing threat of climate change. And, we must meet these goals to reduce harmful emissions that endanger public health.

Air pollution and carbon emissions from the transportation sector are significant in many of the world's urban areas. The fastest growing markets for automobiles are in Asia, especially in India and China. These are the same countries whose large cities experience chronic poor air quality that create significant public health problems. Understandably, several countries, including Britain, France, India, and China, this year announced ambitious goals to restrict or eliminate sales of new gas and diesel cars within the next few decades.

The auto industry claims that it cannot meet stricter fuel efficiency and emission reduction goals by 2025. But their efforts to seek harmonization through credits and so-called credit banking will only serve to undermine and erode the laudable goals previously set by the Obama administration.

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We know that technologies to produce more efficient and less polluting vehicles are available and affordable today. Those vehicles must be produced, and they must be marketed with at least the same level of resources used to market the large, inefficient sport utility vehicles currently being pushed by industry. There is simply no justification for easing up on this important effort that will benefit public health, the environment, and American manufacturers, who will reap the benefits of our Nation being out in front, instead of being dragged behind.

Thank you, I yield back.

Mr. LATTA. Thank you. The gentleman yields back, and this now concludes our Member opening statements.

The Chair would like to remind Members that, pursuant to committee rules, all Members' opening statements will be made part of the record.

Again, we want to thank all of our witnesses for being with us today and taking time to testify before our subcommittees. Today's witnesses will have the opportunity to give 5-minute opening statements followed by a round of questions from Members.

Our witness panel for today's hearing will include Mr. Mitch Bainwol, president and CEO, Alliance of Automobile Manufacturers; Mr. Forrest McConnell III, president, McConnell Honda and Acura, Montgomery, Alabama, on behalf of the National Automobile Dealers Association; Dr. Dave Cooke, senior vehicle analyst, Union of Concerned Scientists; and Mr. John Bozzella, the president and CEO of Global Automakers.

We thank you again for all being here, and, Mr. Bainwol, you are recognized for your 5-minute opening statement.

Thanks again for being here.

STATEMENTS OF MITCH BAINWOL, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ALLIANCE OF AUTOMOBILE MANUFACTURERS; FORREST MCCONNELL III, PRESIDENT, MCCONNELL HONDA & ACURA, ON BEHALF OF THE NATIONAL AUTOMOBILE DEALERS ASSOCIATION; DAVE COOKE, PH.D., SENIOR VEHICLES ANALYST, UNION OF CONCERNED SCIENTISTS; AND JOHN BOZZELLA, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF GLOBAL AUTOMAKERS, INC.

STATEMENT OF MITCH BAINWOL

Mr. BAINWOL. Thank you, Chairman Latta, and members of the distinguished committee.

I have an extensive deck to go through, and so I ask for your patience because I am going to zip through it fairly quickly.

I am here today on behalf of the Alliance of Automobile Manufacturers. We are 12 manufacturers from the U.S., from Europe, and from Japan. We represent about 80 percent of the cars on the road in the U.S.

So let me jump in. I've got eight points to make. First point—next slide—is that sales have peaked. We went through 7 years of growth. We are a cyclical industry. We have now peaked.

If you look at the bottom right, you will see that, year over year, we are now down about a point from the first 9 months of '16. You also see a very significant shift in the fleet mix. Cars, over the 5 years, are down 19 percent. Trucks, over the 5 years, are up 38 percent.

Point 2: There has been very broad and strong support for harmonization from environmental voices. Chris Grundler is a senior career guy at EPA who opens up his presentations around the country with a picture of the planet and talks about the importance of saving the planet.

So his bona fides in this area are strong. He says, "I am all in on harmonization. It should not be acceptable for an automaker to pay penalties under CAFE." The ICCT testified here before and said, "Based on the well-designed EPA flexibilities, a harmonized One National Program would best be addressed with NHTSA's program matching EPA's."

The Obama DOT talked about building a single fleet of U.S. vehicles, helping to reduce costs and regulatory complexity. Carol Browner: "A clear and uniform national policy is not only good news for consumers, but also good news for the auto industry, which would no longer be subject to a costly patchwork." We still are.

And, of course, the President of the United States, President Obama, when he was in office: "clear certainty that will allow these companies to plan for a future, in which they are building cars of the 21st century."

So there is strong support from, really, both sides of the aisle.

Point 3: The determination, as has been suggested in some of the opening statements, was rushed. On November 29th, that was a screen shot of the EPA website, which talked about the determination coming out in April of 2018 simultaneously with NHTSA.

November 30th, the screen shot disappeared. It was like those old Soviet photos where the picture of the guy leaves and, bingo,

they are gone. So the process changed. The determination was rushed.

The industry is completely united on the idea of rebooting the MTR. Eighteen CEOs from all the major companies that operate in the U.S.—some of whom are based here, some of whom chose to invest here—all signed a letter asking that we not prejudge the outcome but that we reboot the MTR to the original schedule that was promised when the deal was done in 2011.

Next slide. Point 4: Reality is now contradicting theory. When the final determination came out in January, the line was, “the automakers were overcomplying, everything is fine.”

A few weeks later, NHTSA came out with new evidence on compliance and showed that, for '16 and '17, we are now undercomplying. So the reality on the ground is undercompliance in '16-'17.

Point 5: The math here is really, really important. If you go from 10 to 20 mpg over a thousand miles, you save 50 gallons. If you go from 40 to 50 over a thousand miles, you save 5 gallons. There's a 10-to-1 multiplier focusing on the front end of the curve rather than the back end of the curve. That suggests that the most important thing you guys can do is to make sure that fleet turnover happens as rapidly as possible.

This next slide shows that the bulk of the savings through 2025 has already been realized. NHTSA has proposed through 2025, in terms of gallons saved, 179 million gallons.

If you take 2021 and you plus it up 1, 2, or 3 percent, you get somewhere between 97 and 99 percent of the savings. So we can talk about this big gap in terms of the politics of the issue. But in terms of the substance, through 2025 we're 97 percent to 99 percent there. That's pretty impressive.

I am really running out of time. Gas prices were profoundly wrong—point 6. That's changed the fleet mix in a dramatic way. What you see here in this next slide is a—four lines. The 54 line is the original deal. The 51.4 line is the same deal recalculated with the change in the fleet mix.

And the third line is if you recalculate based on the subsequent fleet mix changes where the deal now is. That's not a stringency adjustment. That is where the number now is, roughly, 50.

The final point here is that consumers have a very important role in this. This is a program that gets measured by what consumers buy, not by what we produce. They are saying they'd like fuel economy, but they are not willing to pay for it.

I will go through, if I can, just two slides. One in three said they would pay nothing for additional fuel economy. One in 10 would be willing to pay more than 2,500 bucks. And then, finally, because they say they like fuel economy, it's important to understand contextually where it fits.

Affordability and reliability are top priorities. Fuel economy and safety follow. So when a consumer goes into the showroom, they're looking for lots and lots of factors and lots of features.

Fuel economy is one of those, but it's not the sole determinant of their choice.

Thank you very much.

[The prepared statement of Mr. Bainwol follows:]



AUTO ALLIANCE
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**STATEMENT
OF THE
ALLIANCE OF AUTOMOBILE MANUFACTURERS**

**BEFORE THE:
ENERGY AND COMMERCE COMMITTEE
SUBCOMMITTEE ON ENVIRONMENT AND SUBCOMMITTEE ON
DIGITAL COMMERCE AND CONSUMER PROTECTION
U.S. HOUSE OF REPRESENTATIVES**

**HEARING TITLE:
“Update on the Corporate Average Fuel Economy Program (CAFE) and
Greenhouse Gas Emissions Standards for Motor Vehicles”**

December 12, 2017

PRESENTED BY:

Mitch Bainwol
President and CEO

On behalf of the 12 members of the Alliance of Automobile Manufacturers (Alliance), thank you for the opportunity to testify today on light-duty vehicle Corporate Average Fuel Economy (CAFE) /greenhouse gas (GHG) emission standards. The Alliance is the leading advocacy group for the auto industry and represents 77% of all car and light trucks on the road in the United States. The Alliance includes amongst its diverse membership companies headquartered in the U.S., Europe and Asia, including the BMW Group, Fiat Chrysler Automobiles US, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of America and Volvo Car Group.

By creating jobs, fueling innovation, driving exports, and advancing mobility, automakers are driving the American economy forward. Nationwide, more than seven million workers and their families depend on the auto industry. Each year, the industry generates \$500 billion in paychecks, and accounts for \$205 billion in tax revenues across the country. Historically, the auto industry has contributed between 3 - 3.5 percent to America's total gross domestic product. No other single industry is linked to so much of U.S. manufacturing or generates so much retail business and employment.

Background

It is hard to believe that I was before the Committee just 14 months ago discussing this same topic. The National Highway Traffic Safety Administration (NHTSA), the Environment Protection Agency (EPA), and the California Air Resources Board (CARB) had recently issued the joint Draft Technical Assessment Report (TAR), a 1,200 page document examining a wide-range of technical issues related to the feasibility of the model year (MY) 2022-2025 light-duty

vehicle GHG emission and augural CAFE standards, as the first formal step in the Mid-term Evaluation (MTE) of those standards. At that hearing, the Alliance highlighted several flaws within the Draft TAR and argued that considerably more technical work needed to be conducted before the agencies moved forward with a proposed determination regarding the appropriateness of the standards or a Notice of Proposed Rulemaking (NPRM). Both EPA and NHTSA also testified at that same hearing and reiterated that the Draft TAR was only the initial step in the MTE, was not a decision document, and stressed that “up-to-date information” would inform the MTE to determine the appropriateness of the MY 2022-2025 standards. That determination was to be issued jointly by the agencies by April 2018 and the agencies had repeatedly represented that they would not complete a Proposed Determination/NPRM until mid-2017 at the earliest¹.

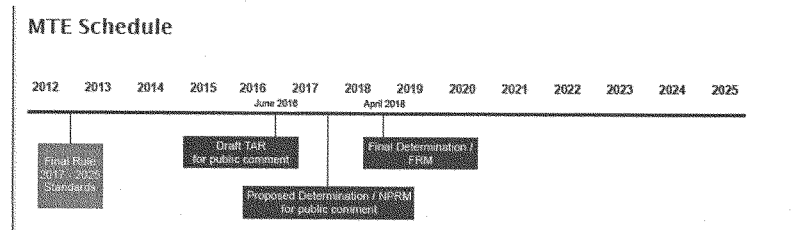


Figure 1: Screenshot of “MTE Schedule” as Available on EPA’s Website on July 8, 2016²

Yet much to our surprise, on November 30, 2016 – just two months following that hearing and on the heels of the presidential election and contrary to what their website showed just a few

¹ Alliance Comments on Proposed Determination at 11. December 20, 2016. Docket ID No. EPA-HQ-OAR-2015-087, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194>.

² U.S. ENVIRONMENTAL PROTECTION AGENCY, *MIDTERM EVALUATION OF LIGHT-DUTY VEHICLE STANDARDS FOR MODEL YEARS 2022-2025*, JULY 8, 2016, 2:35 AM, <https://www3.epa.gov/otaq/climate/mte.htm> (accessed through the Internet Archive Wayback Machine).

months earlier – the EPA abruptly abandoned these commitments and issued the Proposed Determination that the MY 2022-2025 GHG emission standards should remain unchanged. EPA issued that Proposed Determination without the coordination of NHTSA. And, on January 13, 2017, only 14 days after the public comment period closed and seven days prior to President Trump being sworn into office, EPA issued its Final Determination that the MY 2022-2025 GHG emission standards should go into force. By acting prematurely and without the coordination of NHTSA, the previous EPA essentially fractured what is commonly referred to as One National Program – created to align the conflicting federal and state requirements and provide automakers with long-term regulatory certainty and compliance flexibility.

Critical to automakers' agreement to the aggressive MY 2017-2025 standards finalized under One National Program in 2012 were two key elements: (1) a robust, data-driven, and transparent MTE to determine the feasibility of the aspirational MY 2022-2025 GHG emission standards and (2) better alignment of the two federal programs (California accepts compliance with the EPA program). Yet, these two elements have largely been unfulfilled. As discussed above, the MTE process has not unfolded as expected and, until recently, it has not been the robust, transparent, and data-driven process that the previous Administration repeatedly promised. And, further discussed below, One National Program remains misaligned – still amounting to three separate regulatory programs, created under three separate statutes, managed by three separate regulatory agencies.

On February 10, 2017, the CEOs of 18 automakers wrote to President Trump to urge him to reinstate the data-driven MTE and to harmonize the federal requirements. Such broad consensus is rare in this competitive industry, underscoring the egregious nature of the regulatory process

foul committed by the previous Administration. And, we very much appreciate the announcement made on March 15, 2017, by President Trump, along with Department of Transportation Secretary Elaine Chao and EPA Administrator Scott Pruitt, that EPA would revisit the Final Determination and restore the Mid-term Evaluation process. That process is back on track with a determination on the appropriateness of the standards expected by April 2018.

Much has changed since the agencies issued the final rulemaking for the MY 2017-2025 vehicle fuel economy/GHG emission standards in 2012. In my testimony last fall, I pointed out how several of the assumptions – such as gas prices, technology effectiveness and cost, and the consumer acceptance of advanced technology vehicles – on which the agencies determined that automakers would be able to comply with the current MY 2022-2025 standards have drastically shifted since 2012. That pattern has only continued, making compliance with the more aggressive later year standards very challenging.

CAFE/GHG Compliance Trends

At the hearing last fall and in various documents supporting the rushed Final Determination, the previous EPA pointed to the over-compliance by automakers in MYs 2012-2015 as justification to maintain the aggressive MY 2022-2025 GHG emission standards. Yet, had they waited to consider more up-to-date information, they would see that compliance trend data – including the feasibility of meeting the standards, projections on compliance, and the credit system – are increasingly indicating that it is not feasible to meet the MY 2022-2025 GHG emission standards as they currently are set. For example, the most recent data available continues to demonstrate

that compliance trends for MY 2016 are opposite to those of the earlier years upon which the previous EPA based its Final Determination – the industry on average is no longer meeting its targets. Furthermore, preliminary assessments of MY 2017 indicate the continuance of this trend³.

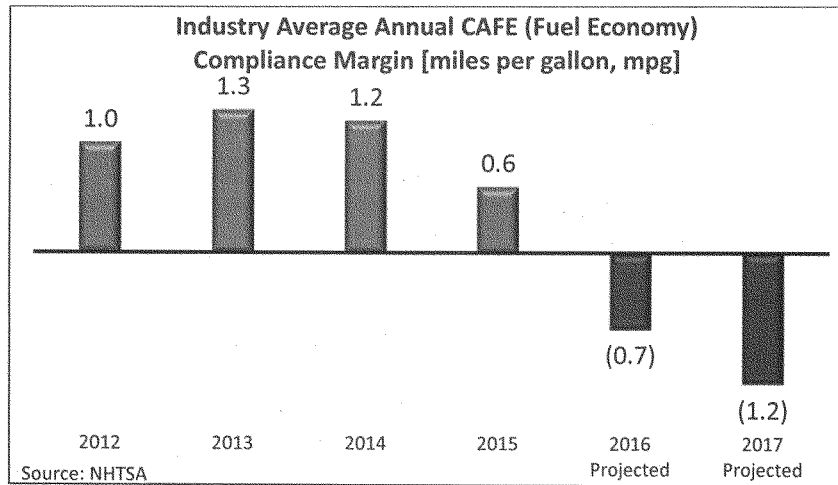


Figure 2: Light-Duty Fuel Economy Compliance Trend

Low Gas Price Environment Affecting Compliance

So what has changed that is causing automakers to fail to meet the standards for the first time since 2004? I noted in my testimony last fall that the fuel market has shifted quite dramatically since the standards were finalized in 2012. While various uncertainties have the potential to

³ Novation Analytics, *MY 2012-2017 Baseline Studies*, November 2017.

disrupt the world oil market, in its 2017 *Annual Energy Outlook*, the U.S. Energy Information Administration continues to project gas prices to remain relatively low through 2030.

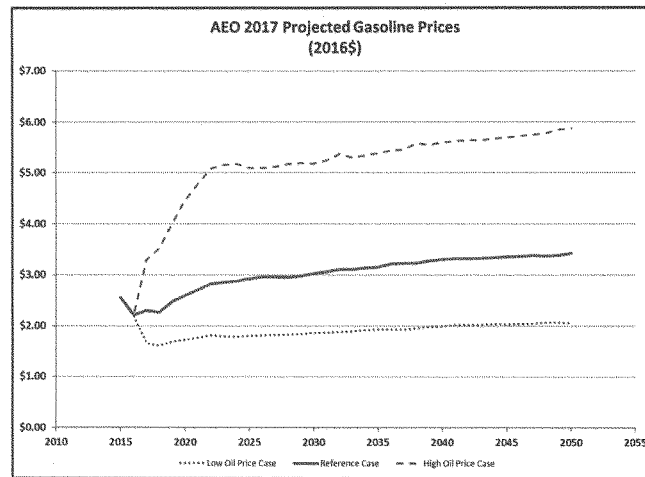


Figure 3: U.S. Energy Information Administration 2017 Annual Energy Outlook Projected Gasoline Price⁴

Such low gas prices have resulted in a disconnect between consumer preferences and the future standards. When gas prices fall, the desire to pay more for a vehicle with higher fuel economy diminishes. We continue to urge the agencies to consider how low gas prices are reducing consumer demand for more expensive fuel-savings technologies and alternative powertrains, thereby impeding overall compliance.

⁴ U.S. ENERGY INFORMATION ADMINISTRATION, ANNUAL ENERGY OUTLOOK 2017 (Jan 5, 2017), tbl.Real Petroleum Prices: Transportation: Motor Gasoline, available at <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=12-AEO2017®ion=0-0&cases=ref2017-highprice-lowprice&start=2015&end=2050&f=A&linechart=---ref2017-d120816a.30-12-AEO2017-highprice-d120816a.30-12-AEO2017-lowprice-d120816a.30-12-AEO2017&ctype=linechart&sourcekey=0>.

Low gasoline prices have been a significant factor in another important development since 2012 – the dramatic shift in consumer demand away from passenger cars to sport utility vehicles (SUVs) and crossover utility vehicles (CUVs). The 2012 Final Rule projected that the 2016 light-duty fleet mix would be comprised of 65.6% passenger cars and 34.4% trucks. Yet, in reality, the actual 2016 light-duty fleet mix was 55.7% passenger cars and 44.3% trucks reflecting an unanticipated shift in market preferences.

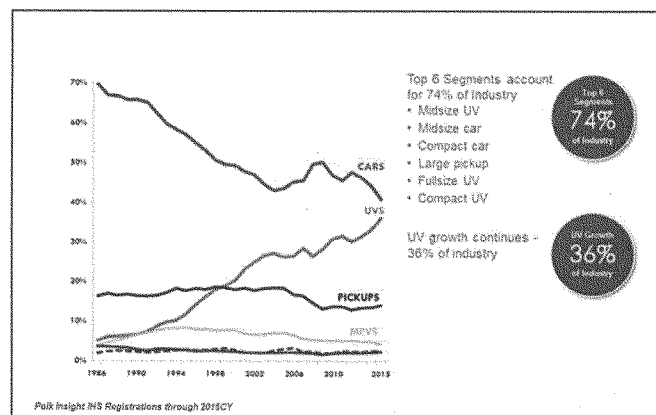


Figure 6: Major Shift in Sales of Cars and Utility Vehicles⁵

Since automaker compliance is dictated by what consumers purchase, not by what automakers produce, this large shift in consumer purchase patterns toward the truck fleet has negatively impacted industry compliance.

Footprint-based Standards Still Have Shortcomings

⁵ Generated from information on file with the Alliance.

Many argue that the introduction of footprint-based standards adequately addresses such shifts in consumer buying patterns between market segments. And, although the footprint-based standards do alleviate certain problems compared to the previous uniform standards that applied the same targets to all automakers, they continue to have shortcomings. There are many aspects of vehicle design and consumer purchase behavior that may occur differently than anticipated when the standards were established. For example, in prosperous economic times or in a low gas price environment, consumers may opt to purchase larger, more powerful engine options, rather than the base engine. They may also spend more on optional content or other features instead of spending more on fuel saving technologies. Some of these features may even reduce fuel economy compared to the base model by adding weight, electrical load, etc.

As noted above, there has been a significant market shift from passenger cars towards trucks. Within the truck fleet, SUV market share has increased relative to pick-ups and within the car fleet, CUV and SUV market share has increased relative to traditional sedans and coupes. Such shifts within the segments are not addressed by the footprint-based standards and create significant compliance hurdles. Figure 7 below shows examples of the fuel economy penalty incurred by SUVs and CUVs. High-volume MY 2016 SUV/CUV models are shown relative to other passenger cars from the same manufacturers that share the same powertrains. In each case, the fuel economy of the SUV/CUV is from 2 miles/per gallon (mpg) to 4 mpg worse than the comparison sedan, while the SUV/CUV footprint is from 3 square feet to 4 square feet less. Both the fuel economy and footprint differentials are unfavorable for regulatory compliance. The industry anticipates that the market shift by consumers seeking the functionality offered by SUVs and CUVs will continue or even grow through MY 2025.

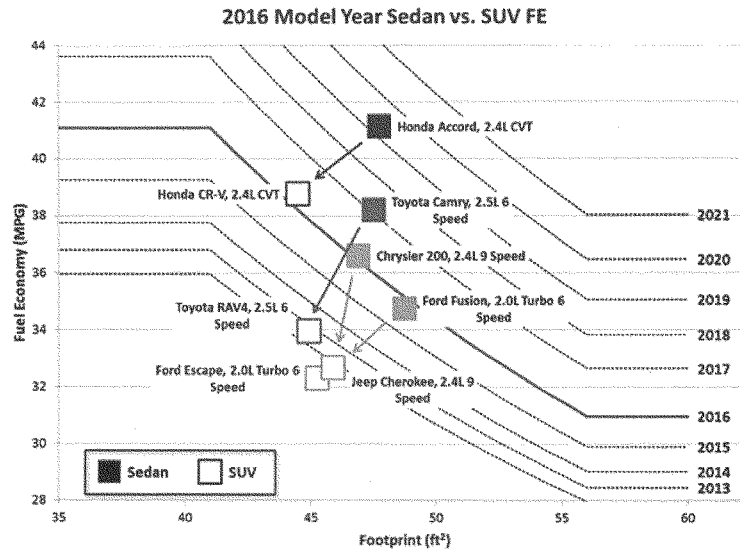


Figure 7: 2016 Model Year Sedan v. SUV Fuel Economy⁶

Strong Electrification Necessary

In the Final Determination issued earlier this year by the previous Administration, EPA concluded that “minimal” penetration of strong hybrid or full electric vehicles would be necessary to meet the aggressive MY 2022-2025 GHG emission standards – 18% mild hybrids, 2% strong hybrids, and 5% plug-in electric vehicles.⁷ In fact, EPA stated that “advanced

⁶ Alliance analysis of data from *Print the Fuel Economy Guide*, FUELECONOMY.GOV, <http://fuel economy.gov/feg/epadata/17data.zip>.

⁷ EPA, Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation at 24, January 2017.

gasoline vehicles will be the predominant technologies that manufacturers can use to meet the MY 2025 standards.”⁸ The Alliance strongly disagrees with this assessment and recent research published by SAE International, Novation Analytics and Oak Ridge National Laboratory found that “the U.S. future standards cannot be achieved without higher levels of electrification than has been previously estimated by NHTSA and EPA⁹. This study estimates that nearly every vehicle sold in the U.S. in MY 2025 will need to be a mild hybrid, or alternatively the fleet will need to consist of greater than 30% full hybrids for compliance.”¹⁰

Consumer Acceptance of Advanced Technology Vehicles

Automakers continue to offer an increasing amount of advanced technology vehicles for sale in dealer showrooms nationwide, including roughly 50 hybrid models and 30 electric vehicle models. Yet, consumer adoption of advanced technology vehicles has not lived up to expectations. Through August 2017, the calendar year 2017 U.S. sales share of zero-emission vehicles (ZEVs) (battery electric, plug-in electric and fuel cell electric vehicles) was 1.05%¹¹, approximately one-fifth of the level projected by EPA for MY 2025.

⁸ Final Determination at 13

⁹ Pannone, G., Betz, B., Reale, M., and Thomas, J., *Decomposing Fuel Economy and Greenhouse Gas Regulatory Standards in the Energy Conversion Efficiency and Tractive Energy Domain*, SAE INT. J FUELS LUBR. 10(1):2017, doi:10.4271/2017-01-0897.

¹⁰ *Id.*

¹¹ Auto Alliance, *ZEV Sales Dashboard: ZEV Market Share*, <https://autoalliance.org/energy-environment/zev-sales-dashboard/>.

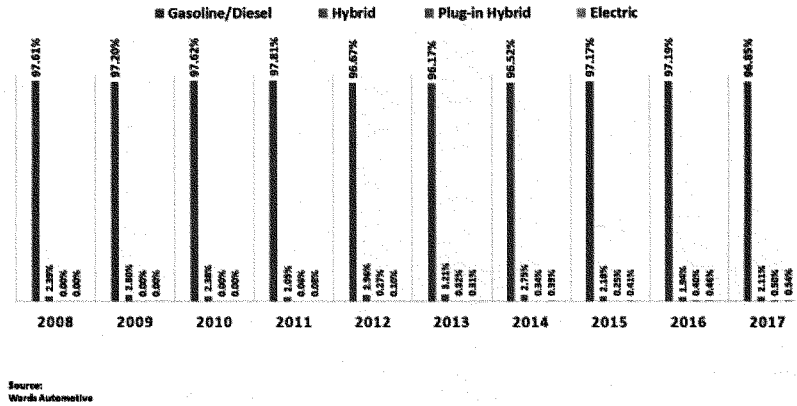


Figure 8: Powertrain Market Share 2008-2017

Although consumers may say they value fuel economy highly, actual vehicle purchasers consider a wide range of other factors when making new vehicle purchasing decisions. Among these are cost, affordability, comfort with new technology, seating capacity, handling, tow and load capacity, safety, and comfort. Often consumers are not willing to compromise such vehicle attributes for high fuel economy and/or low GHG emission technologies. Automakers have limited tools with which to drive customer acceptance despite significant efforts to promote and incentivize highly fuel efficient vehicles.

For example, the 2016 Lincoln MKZ was offered with a variety of powertrains including a 2.0L Hybrid, 2.0L EcoBoost, and 3.7L V6. Lincoln priced the 2.0L Hybrid and 2.0L EcoBoost models at identical retail pricing, providing the opportunity for customers to choose a hybrid without incurring the additional cost, even at the base price. If customers were motivated by fuel

savings, most would be expected to choose the hybrid to reduce fuel costs without increasing their upfront cost. However, only 30% of customers chose the hybrid version, while 70% chose the ICE variants in 2016.

As the Mid-term Evaluation process moves forward, the Alliance has encouraged the agencies to fully examine the factors noted above in evaluating the feasibility of the MY 2022-2025 standards. Such data is precisely the “up-to-date information” the previous Administration either chose to ignore or would have had available to consider had it not truncated the MTE in January 2017. The Alliance also believes that two additional areas that need further examination include the impact of the standards on vehicle affordability and impact of fleet turnover on the overall success of One National Program.

Impact of MY 2022-2025 Standards on Vehicle Affordability & Fleet Turnover

The average light-duty vehicle transaction price in the U.S. continues to increase, and, according to Kelley Blue Book, is now approximately \$35,000. The agencies should evaluate how the slowdown in growth of disposable personal income, the long period of particularly low interest rates, combine with the Federal Reserve’s recent decision to begin increasing interest rates will impact a consumer’s ability to afford to purchase a new vehicle. If consumers have difficulty affording or simply cannot afford the increasingly expensive technologies required for compliance, then they may decide to hold on to their current, less efficient vehicle longer or purchase in the used market. In either case, the cycle of fleet turnover is stalled – resulting in disruption to the industry and national economy, delaying the introduction of advanced vehicle

safety and fuel-efficient technologies to consumers, and reducing the environmental and safety benefits of all standards relying on fleet turnover.

A decline in vehicle sales is not only bad for the environment, since older, less-efficient vehicles remain on the road, it is also bad for employment in the auto industry. There is a direct correlation between auto sector employment and vehicle sales; the higher the sales, the higher the level of employment. This relationship is depicted in Figure 9 below. When new vehicle sales drop, automakers and suppliers begin to scale back production, resulting in eliminated shifts and employee lay-offs. Such a downturn in the auto industry has a cascading effect on the broader U.S. economy.

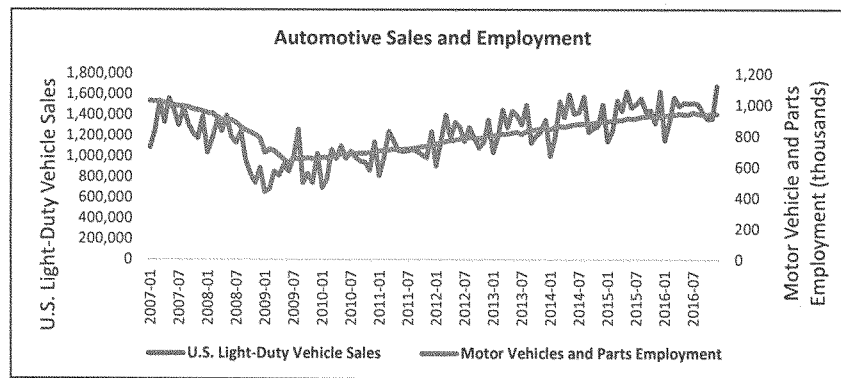


Figure 9: U.S Light-Duty Vehicle Sales v. Motor Vehicle and Parts Employment

Harmonization of NHTSA CAFE & EPA GHG Programs

Central to the success of One National Program is the close coordination between NHTSA and EPA. Resolving to use one set of models and inputs is a critical, common sense step in that direction. The current situation, in which NHTSA and EPA use different modeling tools and

input assumptions to answer essentially the same set of questions, involves inconsistencies and conflicts, is inefficient, and counterproductive. Vehicle fuel economy and greenhouse gas emissions are both calculated by measuring the amount of carbon dioxide and other emissions from a vehicle's tailpipe. Why waste taxpayer resources to have two regulatory agencies model essentially the exact same thing using as a basis the same emissions tests and vehicle fleet? It certainly runs counter to President Trump's Executive Order 13781 to improve the efficiency, effectiveness and accountability of federal agencies. While the different statutes governing the CAFE and GHG programs dictate some minor differences in program designs, there is no reason why the same model cannot be appropriately tailored to capture those differences.

While coordination among the agencies is important for the Mid-term Evaluation, a critical element to the automakers' support of One National Program, that pre-dates the MTE, was to ensure that the two federal programs were as harmonized as possible. In fact, the previous Administration said in its Regulatory Announcement in August 2012 that "Continuing the National Program ensures that auto manufacturers can build a single fleet of U.S. vehicles that satisfy requirements of both federal programs as well as California's program."¹² Unfortunately, attempts to harmonize the EPA and NHTSA requirements have fallen short of expectations. As automakers assess where they are currently and forecast where they see product development and future customer demands, many automakers are anticipating problems in managing compliance with the different programs.

¹² Joint EPA-NHTSA Regulatory Announcement, *EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks*, August 2012.

The Alliance has taken two steps, separate from the Mid-term Evaluation, to address these harmonization gaps: (1) on June 20, 2016 the Alliance and Global Automakers petitioned NHTSA and EPA to address the nine gaps identified that can be addressed administratively. On December 28, 2016, the previous Administration granted consideration of this petition, affirming that our concerns have merit. We continue to work with the agencies to formally address them; and (2) we have sought the introduction of bipartisan legislation in both the House and Senate to address three additional harmonization gaps. The Alliance commends Reps. Fred Upton and Debbie Dingell for recognizing the need to avoid the unnecessary costs that stem from the misalignment of the regulatory programs and that are ultimately passed along to consumers. We applaud their work to craft H.R. 4011, the bipartisan “Fuel Economy Harmonization Act” and urge the Committee to promptly consider this important legislation.

H.R. 4011: Fuel Economy Harmonization Act

The primary source of the three discrepancies that H.R. 4011 seeks to address is the difference in how credits are treated within the NHTSA and EPA programs. Under both programs, automakers can earn credits by producing cars and trucks that are better than the requirements in a given year – and can then apply those credits to deficits that may occur in future years when the requirements are more stringent. As customer demands shift, or when the increasing stringency of the federal requirements exceed the automakers ability to comply given current fleet mix, credits are a key tool for a manufacturer to remain in compliance. However, due to some limitations within the CAFE statute, NHTSA does not have as much flexibility as EPA to address how credits are managed. As a result, it is now likely that many automakers will actually comply with the more numerically stringent (i.e., higher MPG number) requirements

under the EPA program, but because of the different structure of the CAFE program, these automakers could be subject to fines from NHTSA for the same product portfolio. It is important to stress that this harmonization problem is an immediate problem and should be addressed outside of the Mid-term Evaluation.

Let me briefly discuss the three provisions within H.R. 4011 as well as the harmonization discrepancies they are seeking to address.

- 1) **Section 2 (Credit Life):** Allows automakers to utilize “earned CAFE credits” over a longer period of time (up to 11 years) – more consistent with that provided under the EPA program. This Section would allow automakers to more fully utilize credits earned for MY 2010 and thereafter by having treatment of those credits mimic the EPA’s program.

Rationale: Pursuant to the 2007 amendments to the CAFE program, NHTSA has a limitation of 5 years during which these credits can be used (i.e., carried forward). Under the Clean Air Act, EPA has no such guidance or restrictions, so EPA has allowed its credits to exist for as many as 11 years. An important component of the EPA program was to allow automakers to “bank” many credits in the early years – while the stringency is low – to be applied later when the stringency is higher. Unfortunately, as the automakers race to buildup credits in the EPA program, those same credits expire after five years under the NHTSA program.

- 2) **Section 3 (Transfer Cap):** Indexes the credit transfer cap to track the increased stringency of the standards. The cap will gradually increase from 2 mpg in 2017, to

4mpg in 2019, and to 6 mpg in 2022. This provides greater flexibility within the CAFE program – flexibility that is provided at an un-capped level within the EPA program.

Rationale: A similar issue arises for a manufacturer regarding the transfer of credits from one fleet of vehicles to another (e.g., domestic car fleet to light truck fleet). Currently, NHTSA has a statutory limit on the number of credits that can be transferred between fleets while EPA has no such limit. This “fleet transfer cap” limits movement of credits from one fleet to another to a total of 2 mpg -- regardless of how many credits the manufacturer may have available. When the current limitation was originally written in 2007, the overall fleet average was expected to be around 35 mpg by 2020. Today, the target is 54.5 mpg by 2025. This provision increases the 2mpg cap to better track the diminishing returns of higher fuel economy standards.

- 3) **Section 3 (Off Cycle Credits):** Moves up the opportunity to generate “off cycle” credits in the NHTSA program from 2017 to 2012 -- to match the EPA program.

Rationale: Off-cycle technologies achieve fuel economy improvements that are not completely captured by current EPA test procedures. Off-cycle technologies might include such things as: solar panels on hybrids, engine start-stop capability or active aerodynamics (louvers in the grill that close at highway speeds). These technologies provide efficiency improvements for the vehicle, but the current fuel economy tests do not measure their benefit completely or at all. EPA recognized the benefit of these technologies and decided to provide “off cycle” credits to automakers that implement these and other similar technologies. This credit opportunity started with the 2012-2016

rule. For MYs 2014 and later, EPA provided a pre-approved list of technologies and credit values. EPA also allows automakers to petition for credits for items that are not on the list, but for which benefits can be documented. NHTSA has a similar program starting in 2017 but is not providing those credits earlier.

- 4) **Section 4 (Rule of Construction):** Clarifies that this legislation does not impact the Secretary's authority to implement "maximum feasible" fuel economy standards.

Rationale: Many critics of the legislation have mischaracterized the legislation as an attempt to weaken the standards. This language clarifies that the Secretary still has the authority to set standards that are "maximum feasible."

The goal of H.R. 4011 is to ensure that One National Program works as it was intended. Instances where the existing regulatory programs are not harmonized hurt the integrity of the overall program. As indicated, several critics have mischaracterized this legislation as a backdoor attempt to roll back the standards. It is important to stress that this legislation does not amend the EPA program. Again, automakers must still comply with the more numerically stringent EPA GHG program. In the 2012 joint rulemaking, both NHTSA and EPA estimated almost identical amounts of fuel saved from their respective programs through 2021 – NHTSA at 65.3 billion gallons and EPA at 65.6 billion gallons. Because the EPA program will be unchanged by the legislation, these harmonization provisions will not reduce the oil savings projected for the overall fleet of vehicles in the U.S. Harmonization fixes to the NHTSA program will not affect the EPA program.

Additionally, the notion that H.R. 4011 will enable automakers to stop investing in and deploying fuel-saving technologies is false. Automakers already are doing everything that makes sense in pursuit of compliance with the ever-escalating requirements of both federal programs. Product plans and technology deployment are set years in advance. They involve long-term commitments to tooling needed for our facilities and commitments to suppliers for needed parts. Companies cannot simply decide to add technology to already approved and locked-in products to address these issues. And again, companies will still need to comply with the EPA GHG program – thus, driving them to deploy low-GHG emitting and fuel-saving technologies.

Conclusion

The Alliance continues to support One National Program for light-duty vehicle fuel economy/GHG emission standards and views both harmonization and a data-driven MTE of the MY 2022-2025 as essential to the program's success. Automakers remain committed more than ever to deploying ever-efficient vehicles on U.S. roads to maximize our energy security and environmental objectives. It is not a matter of *if* we will meet the aspirational goals set by the previous Administration in 2012, but rather, it is simply a matter of *when*. We look forward to continuing to work with Congress, this Administration, and California to ensure that the ongoing data-driven Mid-term Evaluation establishes future standards that are technologically feasible and will enable automakers to continuing producing fuel-efficient vehicles that consumers are able to afford. In the near-term, we urge the Committee and Congress to consider and adopt H.R. 4011. A harmonized One National Program will deliver on the unfulfilled commitment

made by the previous Administration and will benefit both the industry and consumers, while ensuring the program remains a success.

Thank you for your consideration of our views.

Mr. LATTA. Thank you very much.

Mr. McConnell, you're recognized for 5 minutes.

STATEMENT OF FORREST MCCONNELL III

Mr. MCCONNELL. Mr. Chairman, ranking members of this joint subcommittee, thank you for allowing me to testify on the topic of fuel economy.

My name is Forrest McConnell. I am a third-generation Honda dealer from Montgomery, Alabama. I am also former chairman of the National Automobile Dealers Association, which represents over 16,000 dealers who employ 1.1 million people.

I've been in the car business for about 40 years selling fuel-efficient Hondas through good times and bad. But one thing never changes. People buy new vehicles based on two factors: one, does it fit their needs, and two, can they afford it?

So how fuel economy is regulated is very important to my customers. Mr. Chairman, Rube Goldberg would be proud of the convoluted way our Nation regulates fuel economy.

As Members know, there are not one but three fuel economy programs that automakers must follow. These different fuel economy programs are administered by three different agencies—NHTSA, EPA, and the California Air Resources Board—under three different sets of rules pursuant to three different laws, potentially resulting in three different standards, all of which must be separately followed.

These sometimes contrary regulations were labeled by the Obama administration as One National Program, but they're actually three separate programs.

When Congress established CAFE, they gave NHTSA the sole authority for setting fuel economy standards. To avoid a patchwork of State standards, Congress also correctly preempted States from regulating fuel economy.

Since 2009, we've had something very different. Multiple regimes under the One National Program flow from judicial and executive branch actions. This program put EPA in charge of setting fuel economy policy and allowed California for the first time to set its own standard.

These actions have undermined the CAFE program that Congress created. Congress should return to one actual fuel economy program. There are benefits to having regulatory clarity.

For example, the CAFE program was written to regulate fuel economy. When setting standards, NHTSA must balance job loss, consumer choice, safety, and market demands.

In contrast, the Clean Air Act was not designed to regulate fuel economy. The EPA is not required to balance factors such as consumer choice, safety, or job loss when setting a standard.

California's regulation only considers economic factors in that State, which is why it makes poor national policy. California and every State is expressly—expressly—preempted from regulating fuel economy. Yet, this has been ignored since 2009.

All this unnecessary regulation costs money. Multiple fuel economy regimes harm customers because auto manufacturers must charge more for the cars that customers want to subsidize the cars the regulators demand.

These regulatory costs help make the One National Program the most expensive set of rules ever, at a cost of \$209 billion. Now, I've never seen a billion dollars, but I understand it's a lot of money.

This will raise the average price of a vehicle nearly \$3,000 and will price over 6 million people entirely out of the new car market.

America will benefit from returning to one real national fuel economy program established by Congress. This is not a new idea.

In 2011, the House passed a bipartisan bill sponsored by Congressman Upton that would have re-established CAFE as the sole fuel economy program.

Mr. Chairman, we can do better than this Rube Goldberg way of setting fuel economy policy. Let's bring accountability back by returning to one national policy. This approach will create continuous fuel economy improvements that customers want and that they can afford. The power rests with you.

Thank you.

[The prepared statement of Mr. McConnell follows:]

Statement of Forrest McConnell
Former Chairman, National Automobile Dealers Association
before the
House Digital Commerce and Consumer Protection Subcommittee
and the
House Environment Subcommittee
regarding a hearing entitled
**“Update on the Corporate Average Fuel Economy Program (CAFE) and
Greenhouse Gas Emissions Standards for Motor Vehicles”**

December 12, 2017

Chairman Latta, Chairman Shimkus, Ranking Member Schakowsky, Ranking Member Tonko, members of this joint subcommittee, thank you for inviting me to testify on the topic of fuel economy. My name is Forrest McConnell, and I am a 3rd generation Honda and Acura dealer from Montgomery, Alabama. I am also a former chairman of the National Automobile Dealers Association (NADA), which represents over 16,000 dealers who employ 1.1 million people.

I’ve been in the car business for over 40 years selling fuel efficient Hondas, through good times and bad, but one thing never changes: people choose the new vehicles they buy primarily on two factors: (1) does it fit their needs; and (2) price – can they afford it? These important considerations make how fuel economy is regulated relevant to every auto dealer in America and their customers.

Mr. Chairman, some Members may be surprised to learn that there are not one, but three fuel economy programs that automakers must comply with. These different fuel economy programs are administered by three different agencies – the National

Highway Traffic Safety Administration (NHTSA), the Environmental Protection Agency (EPA), and the California Air Resources Board (CARB) – under three different sets of rules, issued pursuant to three different laws, potentially resulting in three different standards, all of which must be separately complied with. These duplicative and sometimes contrary regulations were labelled by the Obama Administration as “One National Program,” but in reality, they are three separate programs.

Before the Obama Administration’s “One National Program” began in 2009, fuel economy was regulated by NHTSA under the Corporate Average Fuel Economy program or CAFE. When Congress established CAFE in 1975,¹ it gave NHTSA sole authority for setting national fuel economy standards.² To avoid a patchwork of state standards, Congress also expressly preempted states from regulating fuel economy, or even issuing regulations “related to” fuel economy.³ Congress modernized the CAFE program in 2007 on a bipartisan basis, leaving this regulatory structure intact.⁴

Two years later, due to actions by the judicial⁵ and executive branches, the Obama Administration’s “One National Program” was established.⁶ Despite statutory language to the contrary, EPA was put in *de facto* charge of setting fuel economy policy.

¹ Pub. L. No. 94-163, 89 Stat. 901

² See Pub. L. No. 94-163, 89 Stat. 903. NHTSA sets fuel economy standards through a grant of authority by the Secretary of Transportation.

³ 49 U.S.C. § 32919(a)

⁴ Pub. L. No. 110-140, 121 Stat. 1499

⁵ See *Mass. v. EPA*, 549 U.S. 497 (2007). Nothing in this Supreme Court decision required EPA to regulate auto tailpipe greenhouse gas (GHGs) emissions by establishing a fuel economy regime that is independent of and in addition to the CAFE program.

⁶ 74 Fed. Reg. 24007 (May 22, 2009)

Moreover, CARB was allowed for the first time to set its own fuel economy standard,⁷ which was adopted in 12 states by operation of law. Because of these actions, the CAFE program Congress designed has been reduced to a near nullity.

This joint subcommittee should reexamine whether returning to fuel economy standards set by NHTSA, under rules designed by Congress, is preferable to the current structure. There are benefits to having regulatory clarity, and to the CAFE program. For example:

- The CAFE program was specifically written to regulate fuel economy. When setting fuel economy standards, NHTSA must balance job loss, safety, consumer choice and market demands. The law Congress wrote demands that NHTSA set fuel economy standards at the maximum feasible level and balance these important considerations.
- In contrast, the Clean Air Act, which EPA regulates under, was not designed to regulate fuel economy.⁸ Additionally, EPA is not required to balance the

⁷ 78 Fed. Reg. 2112 (Jan. 9, 2013)

⁸ The main vehicle GHG is carbon dioxide, the emission of which can only be significantly reduced by raising a vehicle's fuel economy. Indeed, according to CARB, "...although NHTSA's CAFE standards do not constitute motor vehicle emission standards, they are closely related to EPA's corresponding greenhouse gas emission standards...." See *"Comments of the California Air Resources Board Responding to The National Highway Traffic Safety Administration's Notice of Intent to Prepare an Environmental Impact Statement for Model Year 2022-2025 Corporate Average Fuel Economy Standards,"* pg. 8. (Sept. 8, 2017) (Docket No. NHTSA-2017-0069). This relationship is so close that all fuel economy testing since the early 1970s has involved capturing and measuring the amount of tailpipe CO₂ emitted by a vehicle during a standard test procedure. To be sure, EPA can and does regulate other motor vehicle GHGs that "generally do not relate to fuel economy." See 77 Fed. Reg. 62674 (Oct. 15, 2012). Regulating those pollutants, however, does not justify establishing a fuel economy regime that is independent of and in addition to the CAFE program.

important factors Congress mandated NHTSA to consider when setting a standard, such as consumer choice or job loss.

- California’s regulation considers economic factors -- but only in California.⁹ So if California’s regulations causes job loss in other states, California regulators don’t consider those impacts. Moreover, CARB is officially helping set national policy, yet is not accountable to Congress. Finally, every state, including California, is expressly preempted from regulating fuel economy, yet this prohibition has been ignored since 2009.

All this duplicative regulation costs money – be it additional compliance costs for manufacturers, or the building of “compliance vehicles” solely to satisfy EPA and California regulators. Ultimately, multiple fuel economy regimes impact nearly every new vehicle buyer, because automakers are forced to charge more for the vehicles consumers want to subsidize the building of vehicles regulators want.

These unnecessary regulatory costs help make the Obama One National Program the most expensive set of rules ever imposed on the auto industry, at a total cost of \$209 billion.¹⁰ According to these rules, this program will raise the average price of a

⁹ Cal. Health & Safety Code § 43018.5

¹⁰ 74 Fed. Reg. 14206 (Mar. 30, 2009); 75 Fed. Reg. 25348 (May 7, 2010); 77 Fed. Reg. 62657 (Oct. 15, 2012).

vehicle by nearly \$3,000,¹¹ and we believe will price over six million people entirely out of the new car market.¹²

Let me be clear: Manufacturers and dealers are committed to bringing new, innovative and effective technologies to market in order to provide our customers with the vehicles and features they truly want while moving fuel and emissions efficiencies forward. But these new technologies are going to cost real money to real people, and our customers are already telling us that car prices are increasingly out of range.

America would benefit from returning to the one national fuel economy program established by Congress. This is not a new idea. In 2011, Congress passed a bipartisan bill, sponsored by Congressman Upton, that would have reestablished CAFE as the sole fuel economy program.¹³

Mr. Chairman, let's bring accountability back by returning to one national fuel economy program with rules set by Congress. Thank you.

¹¹ *Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations for 2013*, 112th Cong., 2nd Session, pg. 35, (March 8, 2012) (question by Rep. John Carter to Secretary Ray LaHood). See also 74 Fed. Reg. 14413 (Mar. 30, 2009); 75 Fed. Reg. 25635 (May 7, 2010); 77 Fed. Reg. 62852 (Oct. 15, 2012).

¹² David Wagner et al, *The Effect of Proposed MY 2017-2025 Corporate Average Fuel Economy (CAFE) Standards on the New Vehicle Market Population*, NADA, pg. 5, (Feb. 13, 2012).

¹³ H.R. 910 (112th Congress)

Mr. LATTA. Thank you very much, and at this time, Dr. Cooke, you're recognized for 5 minutes. Thanks for your testimony.

STATEMENT OF DAVE COOKE

Dr. COOKE. Thanks. Good morning, Mr. Chairman and ranking members.

My name is Dr. Dave Cooke, and I am a senior vehicles analyst with the Union of Concerned Scientists, a nonprofit advocacy organization whose primary mission is to ensure that policy is crafted on the best available science without political interference.

I appreciate the opportunity to comment this morning on the current fuel economy and emission standards. Transportation is now the leading source of carbon dioxide emissions in the United States, and the 2012 to 2025 light-duty vehicle standards represent the largest single step towards reducing greenhouse gas emissions and oil use in the U.S.

One National Program recognizes the independent authorities of the National Highway Traffic Safety Administration, Environmental Protection Agency, and California, as well as the States that follow California's lead on tailpipe pollution regulations.

At the same time, it helps provide a coordinated approach to achieving reductions in oil use and emissions that allows manufacturers to be able to design a single fleet capable of complying with all fuel economy and greenhouse gas regulations, should they choose to.

Separately, California and other States have adopted a Zero Emissions Vehicle program in order to address air quality issues. These States currently face \$37 billion in annual health impacts related to passenger vehicle pollution.

By 2030, the ZEV program will cut that by 35 percent. While increasing the sales of electric vehicles will ultimately help manufacturers comply with greenhouse gas regulations, that is not the program's primary purpose, and it appropriately is not part of One National Program.

Of course, the implications of One National Program extend beyond national security and under EPCA or greenhouse gas emissions under the Clean Air Act.

These cost-effective standards help put money back into the hands of consumers by saving them money at the gas pump. Improving the efficiency of new vehicles is especially critical for lower- and middle-class families who spend a greater share of their income on fuel, and these standards disproportionately benefit those individuals by making the new and used car market more fuel efficient.

The efficiency of cars and trucks continues to improve as a result of these standards, with SUVs showing some of the greatest levels of improvement year over year precisely because these size-based standards encourage manufacturers to offer more fuel-efficient options in all vehicle classes.

And even as the fleet is becoming more efficient, automakers are setting sales records. At the same time, the success of these standards cannot be taken for granted. Suppliers have invested nearly \$50 billion building and expanding factories around the U.S. as a

result of the certainty these standards provide, growing manufacturing jobs by more than 20 percent.

Anything done to weaken the standards and undermine those investments could have drastic consequences for a supplier base with a broad national footprint and, in turn, the U.S. economy.

This technology investment is part of why we are confident that manufacturers can achieve the 2025 standards. Automakers have barely begun deploying many off-the-shelf technologies that can improve the efficiency of conventional gasoline-powered vehicles, and new unanticipated developments continue to emerge that can reduce fuel use even further.

As a result of this progress, NHTSA and EPA were able to jointly show in the technical assessment report that cost to comply with fuel economy and greenhouse gas emission standards had declined.

As required under the midterm evaluation process agreed to by all parties to the One National Program, EPA reviewed the comments on the TAR and moved forward with the determination on whether its standards for 2022 to 2025 remained appropriate.

Based on the best available economic and technical data, including data provided by manufacturers, EPA concluded that the 2025 standards remained appropriate. In fact, EPA agreed with our assessment that the data shows that manufacturers could meet even stronger standards by 2025.

But the agency chose instead to leave the standards as is to provide the certainty needed for continued investment and efficiency.

By seeking to renegotiate the terms of the One National Program, automakers are injecting uncertainty into the progress, stymieing progress and forestalling investment.

This directly harms consumers and risks long-term impacts for the industry. Ceding leadership as the rest of the world moves forward signals a repeat of the failings that required American taxpayers to bail out the industry in 2008, and suppliers could exit to China or Europe in response.

Rather than wriggling out of their commitment to seek relief, as the alliance puts it, “any way we can get it,” manufacturers should be doubling down on improving efficiency to protect American investment and American jobs.

One National Program is working now to provide fuel savings for Americans, improve national security, and reduce emissions. But this progress is in jeopardy as a direct result of automakers’ recent actions to undermine these standards.

It is critical to continue to hold automakers accountable for the promises they have made to the American people.

[The prepared statement of Mr. Cooke follows:]



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Testimony of Dr. Dave Cooke, Senior Vehicles Analyst, Union of Concerned Scientists, before
the House Energy and Commerce Committee, at the Subcommittee on Environment and the
Subcommittee on Digital Commerce and Consumer Protection joint hearing entitled "Update on
the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions
Standards for Motor Vehicles"

SUMMARY

The Union of Concerned Scientists appreciates the opportunity to comment on the current fuel economy and emissions standards. Transportation is now the leading source of carbon dioxide emissions in the United States, and the 2012-2025 light-duty vehicle standards represent the largest single step towards reducing greenhouse gas emissions and oil use in the United States.

Not only does this policy reduce the adverse impacts of fossil fuel use on our climate and our national security, but these cost-effective standards help put money back into the hands of consumers by saving them money at the gas pump. Improving the efficiency of new vehicles is especially critical for lower- and middle-class families, who spend a greater share of their income on fuel, and these standards disproportionately benefit those individuals by making both the new and used car market more fuel-efficient.

The efficiency of cars and trucks continues to improve as result of these standards, with SUVs showing some of the greatest levels of improvement year-over-year precisely because these size-based standards encourage manufacturers to offer more fuel-efficient options in all vehicle classes. And even as the fleet is becoming more efficient, automakers are setting sales records.

At the same time, the success of these standards cannot be taken for granted. Suppliers have invested nearly \$50 billion building and expanding factories around the U.S. as a result of the certainty these standards provide, growing manufacturing jobs by more than 20 percent. Anything done to weaken the standards and undermine those investments could have drastic consequences for a supplier base with a broad national footprint, and in turn the U.S. economy.

This technology investment is part of why we are confident that manufacturers can achieve the 2025 standards. Automakers have barely begun deploying many off-the-shelf technologies that can improve the efficiency of conventional gasoline-powered vehicles, and new, unanticipated developments continue to emerge that can reduce fuel use even further. As a result of this progress, NHTSA and EPA were able to jointly show in the Technical Assessment Report (TAR) that costs to comply with fuel economy and greenhouse gas emissions standards had declined.

As required under the mid-term evaluation process agreed to by all parties to the One National Program, EPA reviewed the comments on the TAR and moved forward with a determination on whether its standards for 2022-2025 remained appropriate. Based on best available economic and technical data, including data provided by manufacturers, EPA concluded that the 2025 standards remained appropriate. In fact, EPA agreed with our assessment that the data showed that manufacturers could meet even stronger standards in 2025, but the agency chose instead to leave the standards as-is to provide the certainty needed for continued investment in efficiency.

By seeking to renegotiate the terms of the One National Program, automakers are injecting uncertainty into the process, stymying progress and forestalling investment. This directly harms consumers and risks long-term impacts for the industry. Ceding leadership as the rest of the world moves forward signals a repeat of the failings that required American taxpayers to bailout the industry in 2008, and suppliers could exit to China or Europe in response.

One National Program is working now to provide fuel savings for Americans, improve national security, and reduce emissions, but this progress is in jeopardy as a direct result of automakers' recent actions to undermine these standards. It is critical to continue to hold automakers accountable for the promises they've made to the American people.

TESTIMONY

Good morning, Mr. Chairmen and Ranking Members. My name is Dr. Dave Cooke and I am a Senior Vehicles Analyst with the Union of Concerned Scientists, a non-profit advocacy organization whose primary mission is to ensure that policy is crafted based on the best available science, without political interference.

I appreciate the opportunity to speak with the Members of these subcommittees about the current fuel economy and emissions standards. Transportation is now the leading source of carbon dioxide emissions in the United States, and addressing the emissions from this sector is a critical piece in moving towards a more sustainable economy and way of life not for just the United States, but worldwide.

The 2012 through 2025 fuel economy and greenhouse gas emissions standards for passenger vehicles represent the largest single policy step towards reducing greenhouse gas emissions and oil use in the United States. Not only does this policy reduce the adverse impacts of fossil fuel use on our climate and our national security, but these cost-effective standards help put money back into the hands of consumers for the things they want and need thanks to money saved at the gas pump. To date, American new car buyers have saved over \$50 billion in fuel thanks to these standards,¹ and putting these savings back to work in the local economy helps drive economic progress around the country.

Improving the efficiency of new vehicles is especially critical for lower- and middle-class families, who spend a greater share of their income on transportation.² These Americans are more likely to purchase used vehicles and wind up spending much more money on fuel than on

¹ Fuel savings ticker, www.ucsusa.org/clean-vehicles/fuel-economy-ticker.

² Fuel efficiency, consumers, and income, www.ucsusa.org/fuel-economy-low-income.

the vehicles themselves. Rural drivers facing long commutes, particularly in areas of the country more likely to own larger vehicles, face a similar challenge. This means that these standards disproportionately benefit the lowest income individuals—the standards not only make new cars more efficient across all vehicle classes, they are also in turn making our used car market more efficient, saving used car buyers on gasoline costs now and serving as a hedge against future rising gas prices for the people who would be most vulnerable to any price spikes.³

It is clear that these critical standards are working—the latest data shows that the efficiency of cars and trucks on average continues to improve, even though consumers are continuing to buy more and more SUVs and trucks. In fact, SUVs are showing some of the greatest levels of individual improvement year-over-year, directly as a result of these size-based standards, which encourage manufacturers to offer not just more fuel-efficient compact cars and sedans but also more efficient SUVs and crossover vehicles. This is all happening, of course, as automakers have set back-to-back sales records and are on pace to hit over 17 million in new vehicle sales for the third consecutive year, a feat which would be an historic first for the industry.

At the same time, the success of these standards cannot be taken for granted—now is not the time to let our foot off the gas pedal. These standards have helped drive American investment by providing certainty for the industry out through 2025—suppliers have invested nearly \$50 billion building and expanding factories in the U.S. over the past decade,⁴ and that’s a direct result of the certainty these standards provide. Supplier manufacturing jobs outnumber automaker jobs by

³ D. Greene and J. Welch, *The impact of increased fuel economy for light-duty vehicles on the distribution of income in the U.S.: A retrospective and prospective analysis*, <http://bakercenter.utk.edu/white-paper-on-the-impact-of-increased-fuel-economy-for-light-duty-vehicles>.

⁴ D. Sedgwich, “Suppliers’ \$48 billion spending spree,” *Automotive News*, www.autonews.com/article/20160801/OEM10/308019948/suppliers-%2448-billion-spending-spre.

3 to 1 and have been a tremendous source of job growth for the manufacturing sector. These jobs have grown by 20 percent since these standards were finalized,⁵ and 288,000 (about half) of the supplier manufacturing jobs are directly related to the manufacture of parts to improve fuel efficiency,⁶ not to mention the indirect jobs impacted by this local investment. Anything done to weaken the standards and undermine that investment could have drastic consequences for a supplier base with a broad national footprint, with facilities in 48 states and at least 335 Congressional districts.⁷

This strong investment is part of the reason why we are confident that manufacturers can achieve the 2025 standards. Even as we have seen cars and light trucks get more efficient in the past few years, it is important to note that many technologies are barely in their infancy or have not yet been widely deployed. For example, while Ford led the way with its Ecoboost turbocharged engines a decade ago, just 20 percent of vehicles being sold today have this technology. Similarly, stop-start technology has been available for nearly 2 decades, but only recently are we starting to see it applied more broadly to conventional vehicles like the Chevy Cruze—stop-start technology is in just 10 percent of vehicles sold today. Those are just two of the technologies already available which could be deployed to the other 80 to 90 percent of the fleet and provide tremendous savings across the board.

Beyond the “off the shelf” technologies that are ready for widespread deployment right now, we’ve also seen innovative new technology developments over the past few years that virtually

⁵ Bureau of Labor Statistics. <https://www.bls.gov/iag/tgs/iagauto.htm>. Bureau of Labor Statistics. <https://www.bls.gov/iag/tgs/iagauto.htm>.

⁶ Blue-Green Alliance and the Natural Resources Defense Council, *Supplying Ingenuity II: U.S. suppliers of key clean, fuel-efficient vehicle technologies*, www.bluegreenalliance.org/wp-content/uploads/2017/05/Supplying-Ingenuity-vFINAL-low-res.pdf.

⁷ Interactive map available at www.bgafoundation.org/programs/visualizing-the-clean-economy-autos/.

no one anticipated. For example, Mazda is getting ready to deploy a spark-assisted charge-compression engine, which has the efficiency of a diesel engine but runs on gasoline. Just two years ago, this was seen as “pie in the sky”—engineers had been working on it for decades, and a panel of technology experts put together by the National Academies of Science, Engineering, and Medicine expressed total skepticism about the feasibility of this technology by 2025.⁸ Yet Mazda is putting this engine in its high-volume Mazda3, redesigned for 2019. There are similar advancements around dynamic cylinder deactivation from Delphi, variable-compression ratio engines from Nissan, BMW’s extensive use of carbon fiber in its i-Series...I could go on and on about the unanticipated levels of research and development occurring right now which indicate how much farther we can push the envelope when it comes to improving conventional, combustion engine-powered vehicles. But instead I will just note that regulators have historically underestimated how fast technology can be developed and deployed, which is why agency predictions for the cost of compliance are almost always overestimated.⁹ Our own analysis of the costs of compliance with One National Program thus far confirm this to be the case with this program as well.¹⁰

EPA and NHTSA took all of these technical advancements into consideration as they worked on the mid-term evaluation. The first step of the mid-term evaluation was drafting the joint Technical Assessment Report (TAR), in which both agencies agreed that the estimated costs to

⁸ Committee on the Assessment of Technologies for Improving Fuel Economy of Light-Duty Vehicles, Phase 2, National Research Council. *Cost, Effectiveness and Deployment of Fuel Economy Technologies for Light-Duty Vehicles*, National Academies Press: Washington, DC, 2015. p. 2-63.

⁹ E.g., see Carey, M.P. 2016. Methods of estimating the total cost of federal regulation. Congressional Research Service report R44348. January 21; Harrington, W., R.D. Morganstern, and P. Nelson. 1999. On the accuracy of regulatory cost estimates. Resources for the Future discussion paper 99-18, January; and Hwang, R., and M. Peak. 2006. Innovation and regulation in the automobile sector: Lessons learned and implications for California’s CO2 standards. April. Online at www.nrdc.org/sites/default/files/air_08030301a.pdf.

¹⁰ EPA-HQ-OAR-2015-0827-9200, pp. 10-13.

comply had come down since the rules were first crafted. Then, after reviewing the comments on the TAR, EPA moved forward with its required next step in the evaluation process, determining whether its standards for 2022-2025 remained appropriate. Based on the overwhelming amount of economic and technical data available since 2011, including data provided by manufacturers,¹¹ EPA concluded that the 2025 standards remained appropriate. In fact, EPA agreed with our assessment that the data showed that manufacturers could meet even stronger standards in 2025, but the agency chose instead to leave the standards as-is to provide the certainty needed for continued investment in efficiency.

This is in part why I have been so surprised to see the automakers trying to undermine the standards at every turn, each new maneuver injecting uncertainty into the process, stymying progress and forestalling investment in improving the efficiency of the fleet. Manufacturers already have a number of flexibilities and incentives which they can use to comply with the programs, including earning extra credits for alternative-fueled vehicles, the ability to purchase credits from other manufacturers, and average/banking provisions which help manufacturers balance year-to-year compliance with vehicle design cycles. However, in 2016 automakers petitioned the agencies to alter a number of the provisions to the program which they had signed up for back in 2010—in fact, many of the requests were things that automakers had already previously requested and been denied,¹² as clear a case as it gets of trying to renegotiate a deal. Similarly, they have asked many members of this committee for some of these same fixes,

¹¹ <https://blog.ucsusa.org/dave-cooke/epa-correctly-affirms-vehicle-standards-despite-automaker-misinformation>

¹² For example, NHTSA was quite clear that off-cycle credits applied to the 2012-2016 model years would violate its requirement for “maximum feasible” standards (Federal Register 75 (88), p. 25663), and NHTSA twice repudiated industry’s request to circumvent the transfer cap by redefining how credits were banked and transferred (Federal Register 75 (88), p. 25666 and interpretation letter 10-004142 to Tom Stricker, Toyota from Kevin Vincent, NHTSA, dated July 6, 2011).

clearly looking to wriggle out of their commitment. In fact, they've now requested that the agencies consider revising the model year 2021 standard, solely as a way of reducing their requirements, seeking relief as Mr. Bainwol's colleague Chris Nevers put it, "any way we can get it."¹³

There is a lot that can be said about the merits of these requests, or lack there-of, and I am happy to speak to those issues or anything else of which is of interest to the committee. I appreciate your time and thank you for the opportunity to share UCS' perspective.

¹³ Response from Chris Nevers, Alliance of Automobile Manufacturers, to Bill Charmley, EPA, at the public hearing for reconsideration of the final determination. www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-10088.

Mr. LATTA. Thank you very much for your testimony.
Mr. Bozzella, you are recognized for 5 minutes.

STATEMENT OF JOHN BOZZELLA

Mr. BOZZELLA. Thank you, Chairman Latta, Chairman Shimkus, Ranking Member Schakowsky, Ranking Member Tonko.

On behalf of the Association of Global Automakers, thank you for the opportunity to testify today.

Global Automakers represents the U.S. operations of international automobile manufacturers that design, build, and sell cars and light trucks in the United States.

Our member companies have invested \$59 billion in U.S.-based facilities and directly employ over 100,000 Americans. Our members are building cars and trucks that are more fuel efficient and cleaner than ever, and making tremendous strides in vehicle electrification.

Our future progress in reducing emissions and fuel consumption depends on a number of factors, some of which are not fully within the control of manufacturers.

The most important factor is the customer. As we have seen, when gas prices are low, fuel economy is less important to customers when they purchase a new car or truck.

Government regulations are also important. Manufacturers are required to produce vehicles to meet regulatory requirements that may have been set in different times and under very different circumstances.

To that end, as we talk about the fuel efficiency of vehicles, we should also talk about the efficiency of public policy. The auto industry, Federal Government, and State of California established One National Program, ONP, to address the fact that multiple agencies across 15 jurisdictions were using different tools to regulate similar aspects of the vehicle.

The resulting program aims to harmonize CAFE and GHG standards for light-duty vehicles. The ONP provides substantial year-over-year reductions in petroleum consumption across the Nation for all light-duty vehicles while reducing unnecessary regulatory duplication.

Recognizing the nationwide benefits produced by the Federal program, California accepts compliance with Federal standards as compliance with its GHG program.

But despite ONP's efforts to better align, notable differences among the programs remain. That makes no sense.

The current scheme creates friction and drag in the system that slows innovation and imposes unnecessary compliance costs ultimately borne by consumers, with no added environmental or energy benefits.

In fact, under the current standards, as you have heard, a manufacturer could comply with one standard but not the other.

This is a prescription for wasted time, talent, and resources which would be more productively directed toward engineering and other challenges associated with actually reducing vehicle emissions. Some of these problems can be solved in a straightforward manner.

In mid-2016, Global Automakers and the auto alliance jointly submitted a petition to EPA and NHTSA requesting regulatory changes permissible within the statutory constructs of each relating primarily to the banking accruing and applications of credits and process improvements that will promote additional innovative technologies with real fuel savings benefits. The agencies should respond to this petition without delay.

These regulatory changes, however, cannot fully address the differences in Federal statutes, which means that legislation is necessary.

Global Automakers supports congressional action to provide greater certainty and consistency between the Federal programs.

These problems all have solutions. We simply haven't put them to action, and that creates a dilemma. The auto industry is in the middle of fundamental transformations to electrification and automation.

The cars we sell today need to be able to generate the resources to fund these transitions, and we need to be thoughtful about public policy to support these efforts.

Finally, it's critically important that all of the parties remain at the table to work through these issues. It is far preferable that we resolve these issues without litigation or a retreat from One National Program.

Those paths would only create uncertainty, which would discourage investments in innovation and freeze further progress in emissions reductions.

Global Automakers remains committed to a harmonized national approach, and we look forward to working with you toward that goal.

Thank you, and I will be happy to answer any questions.

[The prepared statement of Mr. Bozzella follows:]



Aston Martin • Ferrari • Honda • Hyundai • Isuzu • Kia
Maserati • McLaren • Nissan • Subaru • Suzuki • Toyota

Testimony of John Bozzella

**President and CEO, Association of Global Automakers, Inc. before the
House Committee on Energy and Commerce Subcommittee on Environment and
Subcommittee on Digital Commerce and Consumer Protection Hearing
“Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas
Emissions Standards for Motor Vehicles”**

December 12, 2017

Summary

- Global Automakers' members are manufacturing cars and trucks that are more fuel efficient and cleaner than ever before, and improvements continue. Automakers have introduced numerous improvements in conventional vehicles, as well as remarkable advancements in alternatives to traditional gasoline vehicles, such as plug-in hybrid-electric, battery electric, and hydrogen fuel cell-electric vehicles.
- In 2009, the Environmental Protection Agency (EPA), the National Highway Traffic Safety Administration (NHTSA) and the California Air Resources Board (CARB) established standards under "One National Program" (ONP) to align the different regulatory schemes governing fuel economy and greenhouse gas (GHG) emissions. The ONP includes a "Midterm Evaluation" to assess the assumptions made in 2012 and reexamine the path towards 2025.
- Efforts to harmonize under ONP must continue. Federal and state fuel economy and GHG emissions standards must be further aligned to minimize differences and costs while maximizing environmental and energy benefits.
- There are steps the regulators can take to improve harmonization, but there are underlying differences in the statutes that only legislation can address. Global Automakers supports Congressional action to provide greater certainty and consistency between the federal programs.
- Global Automakers believes that the industry and the global market are moving towards electrification, but significant market challenges remain. The federal government must consider whether we have the right tools to support electrification.
- Global Automakers strongly believes that we need to work together to eliminate inconsistencies in the national program to foster innovation and help reach our shared policy goals.

Testimony

Chairman Latta, Chairman Shimkus, Ranking Member Schakowsky, and Ranking Member Tonko, on behalf of the Association of Global Automakers (Global Automakers), I want to thank you for the opportunity to testify before your Subcommittees today. Global Automakers represents the U.S. operations of international automobile manufacturers that design, build, and sell cars and light trucks here in the United States. Our member companies have invested \$59 billion in U.S. based facilities, and directly employ more than 100,000 Americans. They produce 40% of the vehicles manufactured in this country and sell nearly half of all new vehicles purchased annually in our country.

Our members are manufacturing cars and trucks that are more fuel efficient and cleaner than ever. Specifically, automakers have improved engine and transmission efficiency, reduced vehicle weight, improved aerodynamic designs, and applied innovative fuel saving technologies that provide real world benefits, such as start-stop systems that reduce idling, and more efficient cooling and lighting systems. Since 2011, overall fuel economy of the U.S. light-duty fleet has improved from 28.1 mpg to 32.5 mpg, an increase of over 15%. Our members are also making remarkable progress in vehicle electrification, such as plug-in electric vehicles, which get energy from the grid, and hydrogen fuel cell-electric vehicles, which generate energy onboard by converting hydrogen to electricity. Currently, automakers offer 35 models of electric-drive vehicles in nearly all segments and a variety of price-points.

It is clear that the automobile fleet is undergoing a transformational shift, not only in the area of vehicle powertrains, but also in vehicle automation; however, underlying questions remain: How fast will this shift occur? What role will policy and regulations play in supporting this shift? How

do we continue to encourage smart investment and ongoing innovation, which are critical to a healthy and vibrant U.S. economy?

The auto industry is a critical part of the U.S. economy, supporting over 7 million jobs in all 50 states, and a workable regulatory program addressing Corporate Average Fuel Economy (CAFE) and light-duty vehicle greenhouse gas (GHG) emissions is central to the health of this industry. That is why I appreciate the subcommittees' interest in these matters and their consideration of how to improve harmonization between fuel economy and GHG emission regulations.

The Importance of One National Program

Global Automakers supports the "One National Program" (ONP) – a program designed to solve an untenable situation of multiple regulatory programs aimed at the same goals. The ONP was created to align these regulatory schemes to ensure they operate in the most efficient, streamlined manner and support innovation and strategic investment decisions.

Fuel economy was first regulated solely by the National Highway Traffic Safety Administration (NHTSA) through the CAFE program under the Energy Policy and Conservation Act. In the early 2000's, the California Air Resources Board (CARB) took action to regulate motor vehicle GHG emissions—a metric closely related to fuel economy—and CARB's action led the way for 12 other states to also adopt their own GHG programs. After the Supreme Court's 2007 decision in *Massachusetts v. EPA*, the Environmental Protection Agency (EPA) moved to regulate GHG emissions from vehicles under the Clean Air Act. This resulted in multiple agencies across 15 jurisdictions using different tools to regulate similar aspects of the vehicle.

This circumstance raised concerns that automakers might have to manufacture different versions of vehicles to meet various requirements throughout the country. This risked forcing companies to manage multiple regulatory obligations and created much uncertainty. Further, it risked necessitating companies to divert valuable resources away from investing in the next generation of fuel-savings and safety innovations that would benefit consumers.

Eight years ago, the auto industry, federal government, and State of California established the ONP to harmonize CAFE and GHG standards for light-duty vehicles. The ONP provides substantial year-over-year reductions in petroleum consumption across the nation for all light-duty vehicles and, at the same time, reduces unnecessary regulatory duplication. It has resulted in more fuel-efficient cars and trucks, in every vehicle segment, while still allowing consumers to purchase a wide range of vehicles to meet their individual needs.

Recognizing the nationwide benefits produced by the federal program, California issued regulations accepting compliance with the EPA GHG emission standards as compliance with its GHG program promulgated by CARB. Thus, the “One National Program” became the guiding principle all stakeholders agreed to in order to achieve the common goal of reducing petroleum consumption and emissions while streamlining regulatory compliance.

The Importance of a Robust Midterm Evaluation

In 2012, EPA and NHTSA promulgated standards for model years (MY) 2017 through 2025. California once again agreed to accept compliance with the federal standards as compliance with its own program, recognizing that greater fuel savings and GHG reductions would be achieved

through a national program. Industry supported the second phase of regulation for the ONP, because it promised a pathway of certainty and consistency. In addition, because the 2012 rule established standards over a decade into the future (which is well in advance of product planning and development cycles), and because NHTSA was statutorily prohibited from finalizing CAFE standards beyond MY2021, ONP includes a “Midterm Evaluation” to reexamine the MY2022 through 2025 standards. The reasoning behind this was to ensure that assumptions used by the agencies during the 2012 rulemaking remained valid and, if not, to update the analysis and revise the regulations accordingly. This Midterm Evaluation was, and remains, key to the success of the ONP.

The Midterm Evaluation is ongoing and entails an assessment of a broad range of issues, such as the agencies’ assumptions concerning the effectiveness and market penetration of various technologies, as well as changes in consumer preferences and market conditions, such as fuel prices. The result of this review will be a decision as to whether the standards for MY 2022-2025 should be adjusted, and at a minimum, a NHTSA regulation to codify standards through 2025.

In addition, the ONP standards need to provide sufficient regulatory flexibility to manage product investments, while securing long-term environmental benefits and fuel savings for customers. As EPA, NHTSA, and CARB continue through the Midterm Evaluation process and into the future, harmonization is of critical importance. Through the Midterm Evaluation, regulators should reduce inefficiencies and inconsistencies in the system that create regulatory drag and discourage innovation.

Harmonization Reduces Drag and Encourages Innovation

The promise of harmonization under the ONP—*i.e.*, to have federal and state programs that allow compliance with a single set of vehicles—was well-intentioned, but has not yet been fully realized. Accordingly, determining how to further the goal of harmonization should be at the forefront of the Midterm Evaluation.

Today's programs administered by EPA, NHTSA and CARB remain different in many significant ways, and the extent to which the standards can be further harmonized is an important question not only for the regulators, but also for Congress. Unfortunately, the current scheme creates friction and drag in the system that slows innovation and results in unnecessary additional compliance costs ultimately borne by consumers with no additional environmental or energy benefits. In fact, the current standards result in a scenario in which a manufacturer could comply with one standard, but not the other. A truly harmonized program should not allow for such anomalies. A lack of harmonization results in a less efficient compliance pathway for improving fuel economy and reducing GHG emissions.

A real challenge posed by the two federal programs is that they operate under separate statutory authorities that were developed to achieve different goals – in one case reducing petroleum consumption under the Energy Policy and Conservation Act, and in the other case reducing GHG emissions under the Clean Air Act. Due to differences in the underlying statutory frameworks, the two programs do not equally recognize the societal benefits of the technological strides the automakers are making. Despite statutory differences, which we would encourage Congress to work to resolve, there is more that can be done by the agencies to align the two federal programs.

First and foremost, there are regulatory changes that should be made that can dramatically improve harmonization. In June 2016, Global Automakers and the Auto Alliance jointly submitted a petition for rulemaking to EPA and NHTSA requesting a variety of regulatory changes, permissible within the statutory constructs of each agency. The primary differences outlined in the petition relate to the banking, accruing and application of credits, and process improvements that will promote additional innovative technologies with real fuel-saving benefits. This package of suggested regulatory amendments can easily be made to resolve some of the inconsistencies between the two federal programs, with little to no impact on the programmatic targets. Global Automakers has asked that EPA and NHTSA act quickly to improve alignment within the ONP.

Another area where the agencies can strive for better alignment is in their technical approaches to the rulemaking. The agencies use separate models to assess their respective standards and answer the same questions about the efficacy of fuel economy technologies and their costs. EPA and NHTSA should work together to address inconsistencies between their models, use the same baseline data and inputs, generate new data from vehicle testing and tear downs, and integrate these results into aligned models. Alternatively, if further harmonization and integration of modeling are not possible, then the agencies could consider adjustments to the regulatory targets to align these programs. These regulatory updates can be easily incorporated into the current agency actions to further alignment between the two federal programs.

Even if NHTSA and EPA were to act on the industry's harmonization petition, significant differences between the CAFE and GHG programs would remain due to statutory differences.

Only legislative changes can narrow or eliminate these differences. Global Automakers supports Congressional action to provide greater certainty and consistency between the federal programs.

Zero Emission Vehicle Mandate Impacts on Harmonization

In addition to its GHG emissions program, California has a separate zero emission vehicle (ZEV) mandate, which has been followed by nine other states, primarily in the Northeast.¹ The ZEV program hinders harmonization and detracts from ONP because it establishes sales requirements for specific technologies—which include battery-electric, plug-in hybrid-electric, and fuel cell-electric vehicles—in the states through 2025. Above and beyond these regulatory steps, California and seven of the other ZEV states signed the ZEV “Memorandum of Understanding,” under which these states committed to building a ZEV market to support 3.3 million cumulative ZEV sales by 2025.

While automakers are committed to increasing the electrification of the vehicle fleet, the ZEV mandate greatly impacts the ONP. For instance, compliance with the ZEV mandate imposes costs on manufacturers that are in addition to the costs imposed by the fuel economy and GHG emissions standards under the ONP. This cost is on the order of \$24 billion dollars across the 10 ZEV states.²

¹ The states that have adopted the California ZEV mandate are Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont. For more information, please visit <http://www.drivingzev.com/>.

² California Environmental Protection Agency Air Resource Board, Staff Report <http://www.arb.ca.gov/regact/2012/zev2012/zevisor.pdf>.

Manufacturers are also offering consumers massive incentives—in some instances as high as tens of thousands of dollars—to get them to buy electric-drive vehicles. The reality is that consumers are not embracing these technologies at the desired or projected rates, especially in states that are not investing sufficiently in the charging and hydrogen infrastructure needed to support the vehicles. Vehicle registration data indicates that electric vehicles, as a percentage of all new automobiles registered, represented under one percent (0.7%) of the nation's market in 2016.³

Importantly, the ZEV program produces no incremental nationwide GHG emission benefits despite the high burden placed on vehicle manufacturers. Current CAFE and GHG emissions standards already specify each manufacturer's total fleet-wide emissions, and therefore, in a system that averages together all vehicles in a manufacturer's fleet, the fleet-wide emissions standards act as a cap when combined with an overall compliance fleet strategy.

Despite these concerns, Global Automakers believes that the industry and the global market are moving towards electrification, but questions remain - do we have the right models at the federal and state levels to encourage and support an electric-drive future? How quickly can this shift occur? Are the GHG and CAFE regulations in step with the proper investments needed to fund this shift?

These questions suggest, in the context of the Midterm Evaluation, policymakers should consider how federal and state policy can support U.S. leadership in innovation and investment in the

³ IHS Global Vehicle Registration Data, Calendar Year 2016.

electric-drive technologies needed to meet our long-term petroleum consumption and environmental goals.

Conclusion

Global Automakers appreciates the Subcommittees' thorough attention to the issues of fuel economy and GHG regulations. Congressional oversight of these topics is appropriate and helpful given the significant impact on the industry, our customers, and your constituents for years to come.

Global Automakers strongly believes that we need to work together to eliminate inconsistencies in the national program to foster innovation and help reach our shared policy goals. We need to continue collaboration to develop certainty and consistency in our policies for the nation, and think more broadly about fuel use and emissions today and into the future.

Global Automakers is not asking *whether* we should reduce carbon produced by transportation, but rather *how* best to do it through the appropriate, harmonized regulatory framework; innovative policies that prepare the industry for the cleanest and safest technologies; and in a way that ensures consumers maintain the ability to purchase the vehicles they need to get them to their destinations.

Thank you again for the opportunity to testify before the Subcommittees.

Mr. LATTA. Thank you very much and we appreciate your testimony, and we will now move into our question-and-answer portion of the hearing.

I will begin the questioning and recognize myself for 5 minutes.

Mr. McConnell, as a dealer, how can you tell the subcommittees about consumer trends, especially with respect to the types of vehicles they are purchasing today?

Mr. McCONNELL. Thank you very much for your question.

You know, the customer makes their own decision of what car to buy. You can build cars. That doesn't mean that the customers—the demand is there.

So the two things that I've found is customers buy their needs for a car. For example, we had a customer the other day. She was pregnant, with her second child. Big soccer mom.

You know, they had moved from a smaller car up to Odyssey minivan that suits her needs. But the demand for cars right now is, 63 percent of the people are trucks versus about 34 percent cars. So it's changed tremendously in the last couple of years, and that's because the price of gas went down from \$4 a gallon basically into the \$2s.

Mr. LATTA. Thank you.

Mr. Bainwol, with the current rules and regulations in place, do we in fact have one national standard for CAFE and greenhouse gas emission standards?

Mr. BAINWOL. We do not, effectively.

Mr. LATTA. And how did the EPA's less than 7-week process from public hearing to final determination impact the midterm review?

Mr. BAINWOL. Well, it disconnected first from NHTSA. So, if you go back to 2011, there was essentially a trade, and the agreement was the industry would agree to very ambitious, aggressive targets over a very long period of time through 2025. In exchange, the industry would get a commonsense analytic lookback to make sure that the projections were accurate, and we would get one national program.

What we've gotten is neither. We are pledged to try to get there, but we do not have one national program, and the midterm review was premature.

When the TAR came out, we asked for an extension. We were told, "Don't worry, there's going to be plenty of time." The extension request was denied.

When the original proposed determination came out, we asked for an extension, and it was denied. And over the course—we had about 20 days over the course of the Christmas holidays. And so everything was very compressed, and there was a very strong disagreement about the substance of the report, which we never really got to work our way through.

Mr. LATTA. Let me ask you this, because I believe that you made some comments, and were any of the flawed assumptions that you raised addressed by the agency?

Mr. BAINWOL. Not really, and I think it's worth pointing out there has been an attitude on the part of some that the TAR and the subsequent work was the Holy Grail—that it was without dispute. And I would just simply like to point out that the EPA made

many assumptions, and if you go through and just look at the points, they've been proven false.

There was a massive failure on projecting gas. The fleet mix question was completely butchered. There was a view that we were overcomplying, and we were under complying. So we can talk about the substantive value of that report under which the midterm was set and was finalized. But they made mistakes that were really quite profound.

Mr. LATTA. Let me ask you, because you're pointing out all these mistakes. And your pointing these mistakes out—what did they say?

Mr. BAINWOL. Well, originally, they said there would be time to talk about it later on, and we kind of lost that time.

There are substantive disagreements. We believe—I think the most important mistake, in our view, is just the amount of electrification necessary to comply.

They believe we can comply over the schedule with minimal electrification. We believe much more is required, and if you look at the purchase pattern in the marketplace, that's the real problem.

Mr. LATTA. OK.

Mr. Bozzella, if I could, in my last minute here—by having different standards from multiple agencies leads to automakers building cars consumers are not buying, what effect will that have on jobs and growth in the United States auto industry?

Mr. BOZZELLA. I think it certainly could have a fairly significant impact on jobs and on the growth of the industry.

You know, what's happening here is we are having to waste time and resources on compliance when we ought to devote that time and resources to innovation that improves fuel economy.

So with one standard, what you can do is focus that investment, and it's massive investment, and all of you know and many of you on both sides of the aisle have praised that investment. Many of you represent States and communities where you see that investment firsthand.

What we want to make sure is every dollar of those investments is focused on improving fuel economy as opposed to efforts to comply for the sake of compliance with no benefit.

Mr. LATTA. Thank you very much. My time has expired, and at this time the Chair recognizes the ranking member of the subcommittee, the gentlelady from Illinois, for 5 minutes.

Ms. SCHAKOWSKY. I would just like to point out this is the 2-year anniversary of the Paris Accords and, unfortunately, in my view, the United States is no longer part of that. And it seems to me that what's being considered today might actually increase the pollution caused by weakening fuel economy standards.

So the plea for harmonization between EPA's and NHTSA's program isn't about aligning different regulations. It's about weakening fuel economy standards.

All the credits that the automakers want to be added to NHTSA's program are going to cause stagnation of fuel economy's goals and not harmonizations.

Dr. Cooke, let me first ask you, are these programs working, and are U.S. cars more efficient and less polluting than they used to be?

Dr. COOKE. Absolutely. Vehicles have gotten significantly more efficient over the past 5 years.

Ms. SCHAKOWSKY. Are the yearly goals for the two programs stifling innovation, or actually helping to drive it?

Dr. COOKE. I think the fact that fuel economy is improving and that you see continued new research—every, you know, announcement from automakers shows that they're investing and that this is driving innovation.

Ms. SCHAKOWSKY. And as I understand, the car makers want to reinstate expired credits from earlier years when standards were much more lax, and they want to extend the life of those credits from 5 to 11 years, and they want to add a whole new category of credits to the mix, and they want to relax the caps on their ability to transfer the credits they earn on their cars to their pickup trucks.

Dr. COOKE, have I left anything out in that list of what they want?

Dr. COOKE. No, I think that sounds about right.

Ms. SCHAKOWSKY. Do automakers, Dr. Cooke, really need such a substantial expansion of credits to meet the fuel economy standards?

Dr. COOKE. No, I think the TAR and the work since the vast body of evidence shows that there are plenty of technologies that they could be applying to their vehicles in order to meet the standard, and if they met the CAFE standard, which they're trying to weaken through these credits, they would be in compliance with the EPA standard as well. So—

Ms. SCHAKOWSKY. If automakers were to get all the retroactive credits they're asking for, what would this mean for real improvements in fuel economy, going forward?

Dr. COOKE. The vast volume of credits could really offset and forestall continued investment in inefficiency, and so you could see manufacturers using their credits to stall progress on the fuel economy of the pickup trucks that many drivers are looking to purchase, and that affects our ability in the long term as—through the midterm process, that would set up a trajectory where we have weaker vehicles going into the 2022 model year and the standards are then further weakened through this lack of progress, and we could see 8-to-10-mile-per-gallon reduction in the 2025 targets as a result.

Ms. SCHAKOWSKY. Well, while we are on the topic of credits, car makers have complained about the fact that the EPA has allowed them to get extra credits for using certain technologies like stop-start ignitions systems, but NHTSA has not given them credits.

I am referring to off-cycle credits. We are told that NHTSA needs to harmonize with the EPA and allow these credits to count retroactively toward both emissions goals and fuel economy standards.

So Dr. Cooke, aren't these off-cycle technologies already factored into NHTSA's fuel economy goals?

Dr. COOKE. Yes, that's right. NHTSA explicitly excluded them from the 2012 to 2016 regulations when they set the standards.

Ms. SCHAKOWSKY. And, in fact, didn't NHTSA intentionally set its fuel economy goals lower than EPA's emission goals precisely because its program didn't include these credits?

Dr. COOKE. That's right. Its standard was about 1 mile per gallon lower as a result.

Ms. SCHAKOWSKY. And if NHTSA were to allow off-cycle credits to apply retroactively to its already discounted fuel economy standards, shouldn't it also reset those standards to make them more stringent?

Dr. COOKE. That's correct.

Ms. SCHAKOWSKY. So do you buy the estimate that this would raise the cost of a car \$3,000? Does that take into account what the lower gas price would be?

Dr. COOKE. I have no idea where that \$3,000 number is coming from. It is outdated.

Ms. SCHAKOWSKY. Thank you. I yield back.

Mr. LATTA. Thank you very much. The gentlelady yields back.

The Chair now recognizes the chairman of the Subcommittee on Environment, the gentleman from Illinois, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

I guess, first, following a couple of the lines of questions, to the automakers, first of all, it's just a—it's just a thank you, and to the auto dealer.

You represent America, in which you raise capital, assume a risk, try to prove it's a good, and try to sell a good. You pay living wages. Many times you pay health benefits. You're paying taxes to the country. You're paying local taxes that fund our schools, our towns, and our communities. You probably are supporting local sports leagues and sport teams and stuff like that.

So I always get frustrated when we bring people before us who are doing everything we ask, and they seem like they're on trial and that they're under attack. It just—it is unfortunate.

So, first of all, thank you. Now, to the point—part of this debate is that Obama administration moved the goalpost in this midterm review. Is that correct? Mr. Bainwol and then Mr. Bozzella.

Mr. BAINWOL. Yes, it is correct.

Mr. BOZZELLA. Correct.

Mr. SHIMKUS. And your request is what?

Mr. BAINWOL. Our request is simply to go back to the original Obama time line.

Mr. BOZZELLA. And have a fact-based, evidence-driven process.

Mr. SHIMKUS. Because—and you want that because?

Mr. BOZZELLA. Because we need to get it right. It is critically important to the customer, it is important to investors who are investing in this country, and it is important for all of us who care about reducing greenhouse gas emissions and improving fuel economy. That is why.

Mr. SHIMKUS. And isn't it safe to say that when you do a formula, over time variables in the formula could change?

Mr. BAINWOL. That's correct, and they have changed.

Mr. SHIMKUS. And then give me some examples of those changes in those areas.

Mr. BAINWOL. Well, we talked about the gas price reality, and there's nothing that drives behavior in the marketplace more than the price of gas. So that's the biggest factor, and that has changed the fleet mix, and that has changed ultimately the compliance reality. So we are now undercomplying.

And I think it's important to point out there are two different programs. EPA was estimated to save something like 65.6 billion gallons. The NHTSA program was going to save something like 65.3 billion—essentially, the same thing.

And we are complying with the more numerically stringent EPA program. So, in the discussion of harmonization, that doesn't change. We are not touching the EPA at all.

Mr. SHIMKUS. Let me go to the—Mr. McConnell, just from your observations of the consumers in this process and based upon this discussion, the consumers have changed in their choices of what they want to pull off the lot, right? And can you give me that observation?

Mr. MCCONNELL. Yes. The one thing I wanted to mention, the \$3,000 additional cost to my customers is from the three rules—the total cost. It's in the Federal Registry.

The TAR is in a rule. Customers, as you in life, they make decisions, times change, you have different stages, you have different desires. But, you know, Congress got it right the first time by not having a patchwork.

You want to consider affordability to customers and their consumer choice, and they get the car that fits their needs, and the one thing I want to point out is, this is the customer's money.

A regulator can demand a certain car gets built. But a customer has the right to spend his money. Maybe it's a Prius because that works for you. Maybe you have to have a truck because you have a business, and that's how you earn your livelihood.

Mr. SHIMKUS. Yes. Let me reclaim my time because I am running short. But I am from rural America. We like big vehicles. We like big trucks. So I know what's being sold in, as we say, my neck of the woods.

Let me finish with the auto manufacturers, and this may not be a surprise to some of my friends. There is a Government initiative, Co-Optima, which is underway to define and understand the costs and benefits of high-compression engines and high-octane, low-carbon fuels.

If your industry were to go in that direction, what do you think it would mean in terms of emission reductions or consumer affordability for vehicles in the model year 2021 and beyond?

Mr. BAINWOL. Well, high-octane absolutely has value in terms of fuel efficiency, and I've seen it estimated something in the order of 4 or 5 percent as a plateau shift.

So there's real value on high-octane, and then there's a question of how you get it, and on that question we're a little bit agnostic, but we'd be happy to work with you.

Mr. SHIMKUS. But certainty is part of that process too, right?

Mr. BAINWOL. Yes.

Mr. SHIMKUS. Mr. Bozzella?

Mr. BOZZELLA. Yes. I think you have to look at the vehicle and the fuel are one system. And so that's what's driving that type of work, right. So, if you have more efficient engines and cleaner engines you want to have a fuel that matches one system.

Mr. SHIMKUS. Excellent. I yield back my time.

I thank the chairman.

Mr. LATTA. Thank you. The gentleman yields back.

The Chair now recognizes the ranking member of the Environment Subcommittee, the gentleman from New York, 5 minutes.

Mr. TONKO. Thank you.

Dr. Cooke, as I mentioned in my opening statement, this committee received testimony that automakers are already ahead of schedule to meet standards for upcoming model years.

Did the TAR find that the targets for later model years can be met by mostly efficiency improvements to gas-powered engines?

Dr. COOKE. Yes, that's correct. There's not a significant deployment needed of electrification.

Mr. TONKO. Thank you.

And numerous comments to the TAR and proposed determination outlined a number of technologies that reduce greenhouse gas emissions that are commercially available.

Your testimony mentions a number of proven technologies have not been widely deployed. Some of these have existed for years but still are only found in 10 or 20 percent of new vehicles.

Dr. Cooke, can you discuss how off-the-shelf technologies could be more widely adopted?

Dr. COOKE. Sure. I think you look at what Ford has done with its turbocharged downsized engines, where you can provide equivalent amount of power from a smaller engine. Even they haven't sort of moved that technology across the board, and they're certainly a leader, and other vehicle manufacturers can either move in that same direction with something that's proven or define a new pathway, and we are seeing those developments routinely come out in new announcements every few months.

Mr. TONKO. Why haven't these commercially available technologies been adapted more quickly?

Dr. COOKE. I think one of the challenges is that product cycles are long. They're about 5 years, and so it does take time to redesign a vehicle.

But, at the same time, we've seen instances where, for example, Toyota's large trucks haven't seen a power train upgrade in a decade.

So I think there's inconsistency in the industry in how quickly they're moving these technologies through.

Mr. TONKO. Thank you.

And would additional vehicle models meet higher fuel efficiency standards if more of these commercially available technologies were more broadly utilized?

Dr. COOKE. Absolutely. There is plenty of room for them to meet the standards.

Mr. TONKO. Thank you.

It's also my understanding that there are also several other well-known technologies that are under development and will very likely provide alternative cost-effective pathways toward meeting these standards.

Dr. Cooke, is that accurate?

Dr. COOKE. Yes. I think one of the things that the modeling shows and the fact that the TAR was done both by NHTSA and EPA using slightly different assumptions and different modeling results resulted in a number of different pathways that manufacturers could choose to meet the standards.

So it's a robust analysis that proves that there are multiple pathways of getting there.

Mr. TONKO. And despite the likelihood of these technologies become available in the near future, is it accurate that EPA did not consider them when determining the appropriateness of the model years 2022 to 2025 standards?

Dr. COOKE. I think there are a number of technologies which have been developed since EPA's proposal that show that we can go even further, and developments that were completely unanticipated, not just when the agencies wrote the original rule but even since the final determination.

Mr. TONKO. And why do you believe the EPA and manufacturers have consistently underestimated how fast technologies can be developed?

Dr. COOKE. It's obviously in their interest to only provide regulators data which will result in the standards that are most easily achievable. So, at the same time, I don't understand fully why they underestimate what their engineers are capable of. But history has certainly shown that to be true.

Mr. TONKO. Well, thank you, Dr. Cooke.

I think it's clear that these standards are achievable. They're cost effective and appropriate, and I have full faith in American automakers as well as the existing flexibility of the program to reach these standards.

So I can't support the uncertainty created by reopening the midterm review determination.

Dr. Cooke, last week Administrator Pruitt testified before this committee that the midterm evaluation process was flawed because it did not happen at the April 2018 deadline.

I know we are used to EPA missing deadlines, but is there anything in the regulations that prevented EPA from evaluating the appropriateness of the standards before April 2018?

Dr. COOKE. No. Absolutely not. And given the long product cycles, more advanced notice is preferable.

Mr. TONKO. And do you think there's anything included in the TAR or the determination that makes it incomplete or inaccurate?

Dr. COOKE. I think there was a fairly thorough analysis. It was 1,200 pages and 4-plus years of careful technical and economic analysis, many studies, many peer-reviewed studies, many benchmarking tests in their own labs. There was a lot of data that this was based on.

Mr. TONKO. Thank you very much.

With that, I yield back.

Mr. LATTA. The gentleman yields back and the Chair now recognizes the gentleman from West Virginia for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

I want to deviate a little bit from this issue over the '22 to '25 series and more looking—there was a comment earlier in one of the opening statements about safety.

I am still curious. I see there are competing reports out there, depending upon your perspective, of whether or not the efficiency—and Congressman Tonko and I work together frequently on legislation over efficiency.

So, as an engineer here in Congress, I like the idea of efficiency but I also want to measure the, I suppose, the cost-benefit ratio of what's it doing on safety.

Because some cars are getting lighter. They're using more aluminum, less steel. But yet, you will hear some reports will talk about the fact that in real-world conditions there are more accidents, more people—last year, we had an increase in deaths on the highways. So others will say under a model situation, if all cars were the same size on the highway, there wouldn't be. That's not the real world.

So I would like to hear back a little bit from you about the safety aspects when we continue this, because I want us to continue down the road of increasing efficiency of our cars. But I don't want to do it at the risk of our people that are driving the cars. So that's my first question, and I want to get, if we could, just some quick responses back to safety.

Mr. BAINWOL. I'll jump in. You have hit, obviously, a very important point, and it's one of the reasons why EPA jumping ahead of NHTSA was a problem. NHTSA, under statute, has to look at a range of factors, including safety.

EPA does not. So your concern about safety is valid, and it ought to be incorporated in the analysis, and so I think it's a good thing.

Mr. McCONNELL. He's 100 percent right. The good thing about what Congress set it up with CAFE is, you had to consider safety was one of the factors.

EPA does not. California does not have to consider anything but economic factors only in that State, and as you know they've reduced the massive cars tremendously so that—

Mr. McKINLEY. Well, let me, if I could, reclaim—let me ask a more definite—rather than to keep it open ended. Do you think increasing the efficiency has caused or contributed to the increased accident rate or fatalities on our highways?

Mr. McCONNELL. I don't know if I have the expertise to answer that question. But I will say that Congress got it right because they required CAFE to consider safety, and EPA does not have to consider safety at all.

Mr. McKINLEY. OK. I am running out of time on this, but—

Dr. COOKE. There is no evidence to support the conclusion that these are having an adverse effect on accidents.

Mr. BAINWOL. But what we do know is that the older the car, the bigger the safety risk. A new car has technology to avoid accidents. A new car has structural integrity and is better maintained.

So, if your priority is safety on the roads, the ability to move fleet turnover is crucial.

Mr. McKINLEY. I am sorry I didn't call on you, Mr. Bozzella.

During the testimony—Dr. Cooke's testimony, I saw your body language was very illuminating—that you were shaking your head. Do you want to express yourself in the time—I've got a minute and 13 seconds left—either one of you, to say where you disagree with Dr. Cooke?

Mr. BOZZELLA. I think—and, again, I appreciate Dr. Cooke's testimony—but I think there's a fundamental misunderstanding of the notion of credits.

It's almost as if they're gifts that have been delivered from some magical place. The fact of the matter is these credits are the result of investments that car companies have made that have resulted in progress.

So they've made more achievement, and so this credit is a reward for innovation. It's actually earned for the investment that companies are making. And so the point of this is not—we are almost having an abstract conversation about credits.

It's really important to recognize that these are important tools in the toolbox, because what they do is they encourage innovation and they also help balance and smooth the ups and downs of product development cycles in a program where year-over-year fuel economy increases are required.

Mr. MCKINLEY. Thank you.

Mr. Bainwol, do you have anything to add to that?

Mr. BAINWOL. That was the right analytic answer. My body language was, I was just imagining Dr. Cooke running a car company, because he seems to have a vision that is profitable, but real car companies have apparently not the capacity to do that. So—

Mr. MCKINLEY. I yield back.

Mr. LATTA. Thank you. The gentleman yields back.

And the Chair now recognizes the gentlelady from California for 5 minutes.

Ms. MATSUI. Thank you very much, Mr. Chairman.

The Clean Air Act gives the EPA the authority to grant the State of California a so-called waiver to adopt its own air pollution standards for vehicles.

Approximately a dozen States have adopted California standards as well. Mr. Cooke, can you please tell us why California was given the ability to adopt its own emission standards?

Dr. COOKE. Sure. California's leadership predates the Clean Air Act. They were the first body to regulate tailpipe emissions from the vehicle industry.

Ms. MATSUI. And also because of the huge pollution that they had in the State also?

Dr. COOKE. Exactly.

Ms. MATSUI. When California applies for a waiver to set its own standards, what conditions does the EPA consider while deciding whether to grant that waiver?

Dr. COOKE. First, it's important to point out that the default is that the waiver is accepted unless it meets one of three criteria: either that the regulations were arbitrary and capricious, so not a well-thought-out standard—inconsistent with EPA's authority under the Clean Air Act, or not compelling or extraordinary circumstances, and I think it's very clear when you look at the wildfires burning why the greenhouse gas emission standards are compelling and, clearly, the air quality issues in California create extraordinary circumstances for ZEV.

Ms. MATSUI. So has the EPA ever revoked one of California's waivers?

Dr. COOKE. No waiver has ever been revoked once it's been granted, and it's not even clear what the process would be to do so.

Ms. MATSUI. OK. There are over 25 million registered cars and licensed drivers in the State of California. I am particularly interested in how CAFE standards and greenhouse gas emissions standards impact drivers in my State and across the country.

Mr. Cooke, I think we've heard this here before, but I've heard the argument that the vehicle efficiency standards raise costs for consumers. But I understand your organization has found otherwise. Do you know how much money drivers are saved because of the standards on a per-vehicle basis?

Dr. COOKE. Yes. Consumers would stand to save about a little over \$3,000 on the purchase of a new car or about nearly \$5,000 over the lifetime of a purchase of a new truck, and that's at gas prices that we are at now.

Clearly, if they increase in the meantime that would be significantly higher.

Ms. MATSUI. OK. And do Americans generally support strong fuel efficiency standards?

Dr. COOKE. Absolutely. Poll after poll shows that folks support strong fuel economy standards. Seven in 10 Americans specifically support Government setting strong fuel economy standards, and that finding crosses aisles.

Ms. MATSUI. OK.

Mr. Cooke, you mentioned that both the EPA and your organization found manufacturers could meet stronger standards than are currently written for 2025.

What data and information do you study to come to this conclusion?

Dr. COOKE. Sure.

You know, the analysis that's been conducted has been extensive. But each month that passes, we see a new data point.

The fact that both EPA's and NHTSA's models confirmed that the costs had come down shows robust evidence. Then vast amount of peer-reviewed literature the EPA has been generating.

The Indiana University study that was funded by the alliance actually shows that hundreds of thousands of jobs are created as a result of these standards. So there are positive economic outcomes, new data based on suppliers that ICCT has put out. I mean, the list is extensive.

Ms. MATSUI. OK. And as I mentioned earlier, the International Energy Agency has found that the transportation sector is the only sector in which energy efficiency has grown worse in this country over the past 15 years.

Have you seen any factors, Mr. Cooke, here in the United States that explained this trend? Why do you think we've become less efficient in the transportation space while more efficient elsewhere?

Dr. COOKE. I think one of the things that's critical is the result of the mix shift. So we are seeing a swing back to the purchase of larger cars and trucks—SUVs and pickups. And so it's really critical that these standards remain strong because they drive improvements across those vehicles and ensure that cars, trucks, and SUVs get more efficient over time.

And so we've seen a plateau as a result of that fleet mix, but these standards will continue to drive that and put us back on the right course.

Ms. MATSUI. OK. Thank you, and I yield back.

Mr. LATTI. Thank you very much. The gentlelady yields back, and the Chair now recognizes the gentleman from Illinois for 5 minutes.

Mr. KINZINGER. Thank you, Mr. Chairman. Thank you for yielding, and I want to thank all of you for being here and spending time with us today on this really important issue, and it's essential.

We'll start with Mr. McConnell. I know it's been mentioned prior but in your testimony you state that the national program set by the last administration raised the price of each vehicle by nearly \$3,000, and that doing so will price out over 6 million people from the new car market.

Can you please explain how you arrived at those numbers and how consumers would react, based on your experience?

Mr. McCONNELL. Well, the \$3,000 is the total cost for the three rules. It's been noted in the Federal Register. The most important thing to know is fleet turnover.

You know, everybody here is—we'd be in agreement on one thing. We want the fleet to turn over faster to put more people in more fuel-efficient cars. And so, if you make them unaffordable or you make them not as desirable with the customer, you have less people buy cars. So that's it.

To give you an example, the structure that you had set up under CAFE was the right one. I don't think you want California setting the standard for the rest of the country, and I will give you one example.

There is probably many of you in here that own a black car. California CARB had proposed a regulation called cool paint—cool paint. They would eliminate black cars because they become hotter and you have to run your air conditioner a little bit longer. I don't know what Uber would do without a black car but it would be a—

Mr. KINZINGER. I have a black car, too.

Mr. McCONNELL. So it's just—it's what the customer wants.

Mr. KINZINGER. That's real? They actually considered banning black cars?

Mr. McCONNELL. Yes. It's black paint. It's called a cool paint. You can look it up.

Mr. KINZINGER. And is it fair to say that the dealers are concerned that these rules will force them into a position in which they won't be able to provide the cars and trucks to people that want to buy and have prices they can afford?

Mr. McCONNELL. That's right. You know, ultimately we buy the cars that the manufacturers make. They sit on our lots. We own them. But ultimately, to put them in the fleet, the customer has to make a decision, and any business that's successful has to consider what the customer wants—can they afford it? And 90 percent of the cars are financed in this country.

There is not one bank—I've asked at least 12 banks—that will not loan additional money just because your car gets better gas mileage.

Mr. KINZINGER. So most of the people in this room could probably afford a more expensive car, but there's a vast majority—it seems like kind of a regressive tax, in essence.

Mr. Bozzella, from automakers, engineers in the Department of Energy, and many other technical experts—and I know Mr. Shimkus touched on this—but I understand there's been an ongoing evaluation of how high-octane, low-carbon fuels such as midlevel ethanol blend can help reduce emissions and improve efficiency when used with new optimized engines.

In its most recent request from comments on the midterm evaluation, EPA specifically asked for information about the impact of high-octane fuel, and Administrator Pruitt also mentioned consideration of high octane in his responses to questions in this committee's hearing with him last week.

What types of work have automakers undertaken to help evaluate the benefits of high-octane fuels?

Mr. BOZZELLA. Thanks, Congressman.

As you are aware, we are constantly researching and working on the combinations of vehicle systems, power train systems, and fuels. I mentioned in response to Mr. Shimkus' question that you have to think of it as one system—hardware software, engines and fuels—and so we are constantly evaluating new fuel and engine combinations, and we think octane certainly contributes to efficiency, and so there's an opportunity there, right. The way to think about it is, we can—you know, that brings additional benefits to the process while we are still working on gasoline-powered engines.

Mr. KINZINGER. So you're talking about, you know, obviously, that innovation and experimentation. You state in your testimony that the current system is stifling innovation and resulted in increased costs for consumers. Can you explain what factors are predominantly driving this increased cost for consumers?

Mr. BOZZELLA. Yes. It's primarily the bureaucratic drag of trying to comply with three different fuel economy systems as well as a technology-forcing mandate managed by three different agencies across 15 jurisdictions.

It doesn't really make much sense. I think if we can get further alignment and ultimately to one national program as we all—that was the aspiration we all had—we will be able to devote that investment, those substantial resources, to improving fuel economy and reducing emissions.

Mr. KINZINGER. So in the couple seconds I have left, will the existing gap between Federal and State programs, if they're not harmonized, do you expect to see that gap increase over the years?

Mr. BOZZELLA. There is no question about it.

Mr. KINZINGER. All right. Thank you. I yield back.

Mr. LATTA. Thank you. The gentleman yields back and the Chair now recognizes the gentleman from California for 5 minutes.

Mr. MCNERNEY. I thank the chairman. I thank the gentleman from Illinois for giving me 5 seconds there.

I thank the members of the panel this morning. Dr. Cooke, do you think the current standards have helped make the American auto manufacturers more competitive?

Dr. COOKE. I do. I think we saw what happened when they're allowed to sort of stagnate.

Mr. MCNERNEY. Thank you. Well, how do you think—and you have already sort of answered this question, but how do you think

the regulations have driven employment with U.S. automakers, and is this hurting the industry?

Dr. COOKE. I am sorry. You said employment, correct?

Mr. MCNERNEY. Yes. How is it driving employment?

Dr. COOKE. Yes. The fact that you are moving forward with new research and development on new technologies, this is providing a catalyst for increased investment, not just at automakers but specifically it's drawing suppliers to invest in the U.S. as well, and they are a critical tool and they outnumber automaker manufacturing 3 to 1. So it's driving investment in new technologies that's supportive of increased job growth.

Mr. MCNERNEY. And is it hurting the automakers to have to hire these people or—

Dr. COOKE. They don't seem to be—you know, many automakers are seeing extremely high profits right now, and I defer to them on whether they feel like their industry is failing.

Mr. MCNERNEY. OK. What about harmonization? How difficult do you believe that it is—the automakers can meet the different sets of standards that we are hearing about this morning?

Dr. COOKE. It's not very difficult at all, and particularly when it was pointed out explicitly in the rulemaking exactly the pitfalls that would face them and exactly the differences between the two programs, and that was finalized as—you know, when they signed off on One National Program, and nothing has changed about One National Program since they signed off on those rules. They were well aware of the differences between the two programs, and it seems that they are choosing instead to invest in compliance with just one.

Mr. MCNERNEY. OK. You're answering my questions pretty directly here, Dr. Cooke. I appreciate that.

You mentioned that off-the-shelf technologies already available would greatly increase fuel efficiency if it was employed. Could you expand on that a little bit?

Dr. COOKE. Yes. So the fact that automakers have invested and that there are proven technologies shows that the potential is there.

But it takes time to move them across the remainder of their platforms, because a new car is redesigned every 5 years, and maybe there's a significant refresh in the middle at about the 3-year mark.

But, because of that, it takes a long time for even technology that is ready to go to get into the fleet.

But what we've seen established is that there are a plethora of these technologies that are well established, everyone understands, and are still in the low fractions of the fleet.

And so over time, there's plenty of room for improvement without having to resort to the most expensive technologies.

Mr. MCNERNEY. So there is a internal combustion research facility at Sandia Labs there in Livermore, which is near my district. How effective is that, do you know, in terms of providing technology that automakers can use to increase their efficiency?

Dr. COOKE. I am not aware of that specific lab. But the National Labs in general do play a significant proving ground for some of

the more advanced types of combustion technologies, and they're certainly—you know, we've heard the Co-Optima program.

That was in coordination with National Labs, and investment in that basic science, just as in any other field, certainly plays a strong role in development of advanced technologies.

Mr. MCNERNEY. Well, you point out that fuel economy and greenhouse gas emission standards have benefited our economy, our environment, and saved consumers billions.

Since these standards are working, why is the industry seeking to halt this progress and move backwards and maybe hurt itself?

Dr. COOKE. That is a very good question. I think you look at what the industry could be doing, and they could be moving forward.

But we also look at the history of what they have done in the past, and I think there is a little bit of a return to that mindset when you look at testimony in front of House committees over the past 35, 40 years. This is par for the course. They continue—automakers routinely say, "We can't possibly hit that target," and they are still standing. So—

Mr. MCNERNEY. The chairman is going to cut me off, so I am going to yield back.

Mr. LATTA. I didn't cut you off yet.

[Laughter.]

Mr. LATTA. The gentleman yields back. The Chair now recognizes the gentleman from Michigan for 5 minutes.

Mr. UPTON. Well, thank you, Mr. Chairman. I just want to—a lot of good questions asked on both sides. I want to bring my historical perspective into play here for a moment.

I was co-chair of the Auto Caucus for a lot of years. Bipartisan caucus. We all want better fuel efficiency. Consumers want that.

We have made some wonderful strides. Real kudos to the industry for where we are and, frankly, because we have gas prices—saw prices this weekend for \$2.24 a gallon. That's a lot better than \$3.84 8—almost 9 years ago.

And I would dare—when we worked with the industry and with the administration on getting better fuel economy standards, it was never the intent of this Congress and, frankly, I didn't think it was the intent of the administration, the Obama administration, to have something that was different than One National Program, and we thought that that was going to be the case. I think they indicated that back in 2009 and again in 2012.

And I would—Mr. Bainwol, your testimony here, I think we were all surprised, based on their testimony earlier on and where they ended up, literally, as Chairman Walden said, just a week before the election, or a week before the end of the Obama presidency.

When we worked with the industry and with the administration on establishing the time frame for mileage, we put in the provision that, in 2018—years down the road—that there would be a look back: Can the industry actually make these changes at what, hopefully, would be a reasonable price for consumers?

I wouldn't say it was set in to halt the progress. It was to actually measure the science, the efficiencies, and the new vehicles as to whether they would meet those.

Then it was 54 miles per gallon. It was revised down a little bit, so it's about 50. I am averaging here. But, under the rules, I mean, Mr. Bainwol and Mr. Bozzella, I think your best answer—the industry, if you didn't have that look back—what will it take to actually meet 50 miles per gallon, literally, in the year, what, 2024, 2025? Mr. Bainwol.

Mr. BAINWOL. A tough question. I think the premise that we are going to halt progress is false. The only question here is the degree of the slope, and we want the slope of progress to be one that's consistent with selling cars and encouraging the fleet turnover, and that's really what all this boils down to.

So I understand we live in a political system and rhetoric gets heated. But we are talking about getting to the Obama numbers and beyond at some point over time, and the question is how do we manage this in a fashion that's consistent with marketplace realities?

Mr. BOZZELLA. Yes, and just to add to that: I think we are making outstanding progress. There is no question about that.

Mr. UPTON. Yes.

Mr. BOZZELLA. The question really is, Are we testing the assumptions we made? For example, it's unclear to us really what types of technologies will be into the cars and trucks that people will need to buy in 2025.

There is not a single gasoline-powered engine that meets those standards today. So I think we should be honest and straightforward about the types of technology pathways we are going to see forward—more electrification, more hybrids.

And so really this is about not only making sure we get the assumptions right for innovators and investors, but also that the customers recognize what the marketplace will look like and are prepared.

Mr. UPTON. Mr. Bainwol, as you know, my colleague and friend from Michigan, Mrs. Dingell, and I have introduced legislation called the Fuel Economy Harmonization Act of 2017 that is designed to correct the inconsistency of having three different standards, in essence, and go back to one.

What are your thoughts on that legislation?

Mr. BAINWOL. We think it's a terrific bill. We think that the impact of the bill is to reduce regulatory friction, and by reducing regulatory friction, that allows for compliance strategies that make sense, and you end up reducing the cost of product, enhancing the ability of people to buy those cars, and that's crucial to employment in your States. So it really is very valuable.

And in terms of dollars, I was told the other day—I am not sure where the data comes from, but if anywhere near the magnitude is right—a billion dollars in savings in terms of costs translates into a thousand dollars on the bonus for a guy who works on the line.

So this is a multibillion-dollar savings in terms of the regulatory friction. That means real disposable income for the workers of this industry.

Mr. UPTON. Thank you. I yield back.

Mr. SHIMKUS [presiding]. Gentleman's time has expired.

The Chair now recognizes the gentlelady from Michigan, Mrs. Dingell, for 5 minutes.

Mrs. DINGELL. Thank you, Mr. Chairman.

I have a lot of questions. I am going to go to my last one first, because I want to follow up on my colleague from Michigan.

When we are talking about—first of all, I am an idealist. Someday we are going to bring permanent peace between Michigan and California—that's my goal here—because I think we all want to have a better environment.

But when we talk about the assumptions that were made when these standards were, here is one example of a technology I would like to pursue. Could all of you answer this question quickly?

Was it not assumed that there would be a far higher penetration in the market of electric vehicles? And people keep making this comment that the companies aren't building EVs.

But is it not a fact that the consumer is not buying EVs? They don't believe that there is an infrastructure in place, and even the 13 States that have ZEV mandates that should be putting them into their fleet are not buying them. Quickly.

Mr. BAINWOL. So yes, yes, and yes.

Mr. MCCONNELL. You absolutely are correct.

Mrs. DINGELL. Dr. Cooke.

Dr. COOKE. There was little penetration of electrification assumed, and 4½ percent in California right now, electric vehicle penetration.

Mr. BOZZELLA. But a half a point nationwide.

Mrs. DINGELL. And it was—that's a part of the problem. And I've talked to Governor Brown. And we are eliminating the tax credit for the EV in the tax bill, and right now we are losing money on those electric vehicles.

Dr. Cooke, how do we get at that?

Dr. COOKE. Sorry. Say that again.

Mrs. DINGELL. How do we get at making the consumer want to buy that electric vehicle?

Dr. COOKE. I think the fact that we are at nearly 5 percent in California shows that, if you put the incentives in place, you do drive—

Mrs. DINGELL. But the incentives are in place—the same incentives, quite frankly, sir. The tax credit is there. The infrastructure needs to be built out. So do we have to work together?

All right. I am going to go to my other questions, because I actually think we are more together than people are thinking. So I would like to ask Mr. Bainwol and Mr. Bozzella, are the members of your trade associations committed to continued fuel economy improvements that are balanced, both technological feasibility and consumer affordability?

Mr. BAINWOL. Yes. So life does not end in 2025. We know that, and we are—

Mrs. DINGELL. Are you for post-2025 standards, which I, by the way, am and want to talk about it.

Mr. BAINWOL. That conversation has to happen, yes.

Mr. BOZZELLA. Yes. I would agree to both points. We are committed to improving fuel economy and over the long haul.

Mrs. DINGELL. This question is for all witnesses, and please answer yes or no.

Do you believe that there is a benefit for having a single set of fuel economy standards across the country?

Mr. BAINWOL. Absolutely.

Mr. McCONNELL. Yes, under NHTSA.

Mrs. DINGELL. Dr. Cooke.

Dr. COOKE. Yes.

Mrs. DINGELL. No?

Dr. COOKE. Yes.

Mrs. DINGELL. Oh, yes? OK.

Mr. BOZZELLA. Yes.

Mrs. DINGELL. And isn't what the Obama administration tried to do in 2010 and 2012 with the creation of one ONP—having a unified approach between NHTSA, EPA, and CARB—isn't that what they tried to do?

Mr. BAINWOL. It was the goal, but it was broken at the end of the administration.

Mrs. DINGELL. Mr. McConnell.

Mr. McCONNELL. I believe that Congress had it right the first time not to have a patchwork, that NHTSA should be in charge.

Mrs. DINGELL. Dr. Cooke.

Dr. COOKE. That was the goal and is still in place.

Mr. BOZZELLA. It was the aspiration, and it hasn't been realized.

Mrs. DINGELL. And, in fact, EPA and NHTSA both clearly stated in their joint MPRM issued in 2012—I have it right here—the need to create a unified approach so that the manufacturers could design one fleet of vehicles to comply with both programs.

And isn't it true that the 2012 joint final rule had two main phases, the first being CAFE standards from model years 2017 to 2021 and then separate projected standards from model years 2022 to 2025?

Mr. BAINWOL. Yes.

Mrs. DINGELL. Dr. Cooke.

Dr. COOKE. Yes.

Mr. BOZZELLA. Yes.

Mrs. DINGELL. OK. So it is my understanding that, when the 2012 joint final rule was released, that the 2022 through 2025 standards were what was called augural standards—in other words, estimated—which represent NHTSA's best estimate of what would be maximally feasible at that time. Is that correct?

Mr. BAINWOL. Yes.

Mr. McCONNELL. I just represent the consumer who wants to be able to afford the vehicle.

Mrs. DINGELL. OK. Dr. Cooke.

Dr. COOKE. Yes.

Mrs. DINGELL. John.

Mr. BOZZELLA. Yes.

Mrs. DINGELL. OK. So, right now, we are going through the mid-term review as we speak. Whether some of you like it or not, it's very important.

We are in the early process, but it's important that it play out and encourage stakeholders to engage responsibly towards a negotiated solution that continues the gains we've seen in fuel economy

since 2012, takes current conditions and real-world data into account, and establishes standards past 2025.

People aren't talking about who's at the table. We need all the stakeholders, including California, and quite frankly, I trust Governor Brown and Mary Nichols—you can quote me on that today—at that table, the Trump administration, automakers, and the environmentalists—it was California I trusted—around the table and working productively in order to make it happen.

Was that not the strength of the original agreement, all the players at the same table giving people certainty and investing for the customer? A failure to reach a negotiated solution will result in less certainty for the industry, weaker standards, and less savings at the pump for consumers.

With that being said, there are still ways that we can improve our fuel economy systems while the midterm review is playing out. This is for all the witnesses. Even though we all—and I am out of time. I have to quit, Mr. Chairman.

Mr. SHIMKUS. You are close to out of time. You going to—was that a question or are you just filibustering or what are you—

Mrs. DINGELL. Well, I actually had a bunch more, but I will put them in the record. Thank you, sir.

Mr. SHIMKUS. Without objection—

Mrs. DINGELL. I just looked up.

Mr. SHIMKUS [continuing]. The gentlelady's time is expired.

Mrs. DINGELL. Thank you.

Mr. SHIMKUS. How fortunate we have the gentleman from Texas, who is recognized for 5 minutes.

Mr. OLSON. I thank my friend, who graduated from West Point. Congratulations one more time, the big victory Saturday—Army again beat Navy for the second time in now 16 years.

With all due respect to my friend from Michigan, I am a bigger optimist. I believe that maybe today we can have this dream: California and Texas working together as opposed to California and Michigan on these issues.

Mrs. DINGELL. How about all three?

Mr. OLSON. Pardon me?

Mrs. DINGELL. How about all three?

Mr. OLSON. All three works, too.

I thank the Chair and welcome our four witnesses. A special welcome, Mr. Bainwol. We share a common bond, my friend: I was Rice University, you got an MBA from Rice University, and my first question is for you, Mr. Bainwol.

In your testimony, you talked about how the 2012 final rule projected a very different mix of cars and trucks than we see on the road today.

Any business has the same motto: The consumer comes first. Can you talk about how consumer preferences shapes your ability to make these rules workable? How do these put the consumer first?

Mr. BAINWOL. So both the CAFE program and other Government programs that are mandates are mandates not on what we produce, but on what people buy.

So, in effect, the consumer—it's not just a phrase—the consumer is king, because they dictate the success of these programs. And when consumers don't buy what policymakers want, it's not the

consumers' fault. They're expressing their own market opinions about what's right for their families.

And what we've seen over time with the plummeting in the price of gas is a very different mix of purchases in the marketplace—so pickups, trucks, SUVs, crossovers—and that has made life more complicated.

Now, there is something called a footprint. So the footprint accommodates some of the fleet mix, but it doesn't accommodate other dimensions of the fleet mix, including power train choices.

Mr. OLSON. Doesn't that show the need for an adaptable, responsive set of rules across the country?

Mr. BAINWOL. Yes, it sure does.

Mr. OLSON. OK. Another question for you, Mr. Bainwol, and you, Mr. Bozzella.

I would like to discuss the harmonization of rules you all work under. To what extent does the lack of harmonization between the two Federal programs impact consumers and innovation?

Mr. BAINWOL. It's basically what I would call a Government externality. The Government is imposing costs on the marketplace that consumers then have to absorb.

And so it is a problem. It make fewer people able to buy cars, it retards the process of fleet turnover, and it has bad social outcomes.

Mr. OLSON. Mr. Bozzella, sir.

Mr. BOZZELLA. And I would just add to that, why, if we are trying to achieve one goal, would we have different tools in different toolboxes? What that does is it creates compliance for the sake of compliance without benefits to consumers, and I think we got to get back to benefits for consumers.

Mr. OLSON. If this is so controversial, then why did the Obama administration grant your consideration of your petition last December? Any idea why?

Mr. BAINWOL. Had there been a different outcome in the election, perhaps we'd be having a more rational conversation about harmonization. So I think some of this gets filtered through the lens of national politics.

Mr. BOZZELLA. I agree with that, Congressman. You ask a great question. We are very close. We are very close. We have the same aspirations and desires, and what we want to do is to create better benefits, more fuel economy, and reduced emissions for consumers, and let's focus on that.

Mr. BAINWOL. And could I add also?

Mr. OLSON. Yes, sir.

Mr. BAINWOL. The conversation we are having today has a feel that somehow that there's a problem, and what we really need to understand is we should be celebrating success. I mean, I had that one slide that showed, if you take the 2021 numbers and you add 1, 2, or 3 percent, we are at 97 percent realization of fuel savings. That's pretty darn good.

Now, we have invested \$100 billion a year in safety, fuel economy, technologies like AVs, and we are producing dividends for the marketplace.

That's a good story, and we should be thankful for the success of this program. And now what we are talking about doing is find-

ing a way to make the economics of the program—the regulatory piece of the program—more efficient so that more consumers can benefit from new cars.

Mr. OLSON. And, well, too, I see you guys make a great difference. My first car was a 1977 Silverado pickup truck. Just one cab, nothing behind the seats. That truck, you could watch the gas gauge go down as you hit the gas pedal. Just boom, maybe 8 miles per gallon.

I now have a 2014 Silverado crew cab—big cab, big truck. I drove from Houston, Texas, to watch my high school play in San Antonio—a basketball game—and drove back on one tank of gas.

I would like to close, Mr. Chairman, by asking unanimous consent to enter into the record a Federal Register from Wednesday, December 20th, about the proposed rule I was talking about. Department of Transportation and Safety—NHTSA, 2016, 10135.

Mr. SHIMKUS. Is there objection?

Hearing none, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. SHIMKUS. Gentleman's time has expired. The Chair now recognizes the gentleman from California, Mr. Cárdenas, for 5 minutes.

Mr. CÁRDENAS. Thank you very much. I am proud to represent California but also equally proud of the fact that California has led the way, sometimes with hiccups and fits and starts, but California has improved its emissions standards and has set the tone quite often.

Let me just give you one example. There are three generations between me and my grandson now—myself, our four children, and my grandson.

I used to tease my kids that used to not be allowed to play outside sometimes—I grew up in Los Angeles when I was a little boy—because of the smog, and then I used to tease my kids that they never had that problem. They never had to deal with a smog alert.

But yet, we have to be careful, because the last thing I want is for my 18-month-old grandson, for me or his parents or his teachers to say, “You can’t play outside.” We have to be careful and make sure that whatever we do, we preserve the environment for our children and we make sure that whatever it is that we do improves on everything that we’ve done in the past—the knowledge, the technology that we are capable of.

So my statement is that fuel efficiency is an important goal across the board. It also allows low-income and middle-class families to have access to cars that run economically. Less money goes to the gas pumps and more stays in their pockets. That’s a good thing. The One National Program also gives low-income folks access to used cars that are fuel efficient. It also impacts the air we breathe.

My district and many in southern California have dealt with wildfires late in the season, last week and ongoing, as we speak. It is no coincidence that these fires are devastating our communities with greater frequency and ferocity. California has been a leader in fuel efficiency and emission standards, and the Nation needs to follow suit.

Dr. Cooke, can you please talk a little bit about the California emission standards?

Dr. COOKE. Yes. So tailpipe standards that were originally set formed the basis for Federal action, and the reason why we can breathe in Washington, DC, is largely a result of the fact that California set those standards way back in the '60s, and that trend has continued with Tier 1 standards and Tier 2 standards that were first set in California and then essentially codified by the Federal agencies and that, again, happened with the LEV 3 standards that are part of the Advanced Clean Cars program.

So we've seen this trend over and over. But, at the same time, California is still struggling to meet its air quality goals for 2030. And so that's why we have the Zero Emission Vehicle program.

Mr. CÁRDENAS. Well, California has approximately—approaches about 40 million people. It is still, what, the fifth, sixth largest economy. It bounces around there.

So the bottom line is anytime you're that large and you're that impactful, especially economically with all the issues that are going on with the population and also with the business, which is to me is a good thing—I am very proud to be from California and the fact that we, if we were our own country, would be ranked fifth or sixth largest economy in the world.

So, that being the case, it is complicated but it's not impossible for us to continue to thrive and strive to be better and cleaner and more efficient and to drive the markets as well.

Dr. Cooke, I would also like to see if you could respond to the idea that the former NHTSA standards with rules designed by Congress were preferable to the current One National Program. Who does the former NHTSA standards benefit, by and large?

Dr. COOKE. So the single number standard, and one of the reasons why we moved to the size-based standard, was especially detrimental to the domestic manufacturers, and it advantaged imported vehicles, and so folks who sell more cars and less trucks.

The fact that we have a size-dependent standard now helps drive investment and competitiveness of the Big Three as well as it does Honda and Toyota.

Mr. CÁRDENAS. So, if I heard you correctly, the current One National Program benefits mostly foreign vehicle makers?

Dr. COOKE. No. Sorry. Prior to the One National Program attribute size-based standards.

Mr. CÁRDENAS. OK.

Dr. COOKE. You know, the old CAFE program used to benefit primarily the imported vehicles, which is why, frankly, CAFE stalled for 20 years.

Mr. CÁRDENAS. OK. All right.

Well, thank you very much, and to go off what one of my colleagues said, again, to add a famous quote, "You can't always get what you want, but you can get what you need," and I think that's the balance we are trying to strike here.

Thank you very much. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair recognizes the gentleman from Oklahoma, Mr. Mullin, for 5 minutes.

Mr. MULLIN. Thank you, Mr. Chairman.

You know, we are talking about achieving certain fuel standards, and we've kind of touched on it, kind of bounced around a little bit about it. But we are talking about the consumer benefit, too.

There has to be a balance between the two, and we are trying to hit our standards that are set forth to us. When Congress had to look back in 2018, I think that was a look back of not only seeing, hey, is it feasible for the industry to hit it, but is it cost productive, too?

So looking forward, what is this going to cost our consumers? And this is open. I am really not too worried about who takes it. What is this going to cost us?

I mean, we see vehicles rising each day in cost. I drive an F-250 crew cab diesel—same vehicle I've driven for the last, I guess, 17 years. The exact same vehicle I bought in 2000 versus today is about \$50,000 difference in price.

Is that due to the regulations we are putting on us? Is that being passed on to the consumers? Mr. Cooke, do you want to take that? I see your finger on the button.

Dr. COOKE. Yes, I would. I mean, I think one of the things that's really important to recognize is what's causing the increase in retail price today.

You know, entry-level vehicles today cost the same when adjusted for inflation as they did 10 years ago. So it's not the technology that's driving people out of the market.

If you want to look at what's the biggest factor that's causing the increase in retail price, it's the fact that now we are selling more SUVs and pickup trucks, which do have higher profit margins. So——

Mr. MULLIN. Well, no, no. My F-250 Lariat crew cab four-wheel drive, I paid just below \$30,000 for that vehicle. So in 17 years the inflation has increased \$50,000? I mean, we've seen that increase across with pay wages and grocery prices? All of them have inflated 100—what is that? Someone help me with the math there. Well over 100 percent?

Dr. COOKE. So I just want to flag that I was specifically talking about the entry-level vehicles. When you look at trucks and SUVs, what we've seen is a large increase in profit margin as a result of moving to higher and higher luxury trims. That's why the fact that you have, like, a \$65,000 F-150 now at the King Ranch version—those SUVs have always been higher profit margins, but we've seen——

Mr. MULLIN. So, but what I am saying is, is this being passed on to the consumer? What we are seeing by fuel savings, because we are talking about keeping more money in the pocket—I think my colleague from California said that—if they can't afford the vehicle to begin with, then what difference does it make?

Mr. Boswell—Bozzella, I am sorry.

Mr. BOZZELLA. It's OK. Bozzella. Thank you.

Mr. MULLIN. Bozzella.

Mr. BOZZELLA. You're right. There is more technology in vehicles today than there ever has been. These cars are cleaner, safer, and more fuel efficient than they ever have been and, of course, there has to be some cost associated with that.

The real question is not only the cost, but the cost combined with where the market ultimately needs to go, and I think, to your question, I think we have to be clear that we need more electric vehicles, more higher priced, more expensive technologies in order to really drive the shift that we are looking for here.

Mr. MULLIN. Go ahead, Mr. McConnell.

Mr. MCCONNELL. Yes. You make a great point. I will say that the cars that are \$15,000 or less have been regulated out of existence. The cost is \$3,000 a car.

I know Dr. Cooke is an extremely smart gentleman. But he keeps talking about what can be built. But the question is, you can't save anything on fuel economy until you're able to afford to buy the car.

Mr. MULLIN. Agreed.

Mr. MCCONNELL. And 6.8 million people will be knocked out by a \$3,000 price increase, and that's done because 90 percent of the people finance a vehicle, and that takes people's debt-to-income-ratio out, it knocks them out of the new car market.

We are all about fleet turnover. Until somebody buys something, and you can build whatever, but as you said, a smart business has to listen to the customer, and we are——

Mr. MULLIN. So is it reasonable then—on what we are trying to do here, is it reasonable to say that a customer is going to be able to afford it and see the cost savings—to be able to pay the difference of what we are going to spend trying to get to fuel standards, what they're going to save on gas?

Mr. MCCONNELL. The realities of the market, though, when the price of gas goes from \$4 to close to \$2, their savings are cut in half.

Mr. MULLIN. Right.

Mr. MCCONNELL. So people make a decision based on what's best for them, as they should, and the National Automobile Association and dealers, we want to sell whatever the customer wants—EV, whatever it may be. But it's the customer, and that's the one thing.

We are—I live my life, and I know dealers—we want higher gas mileage. But you know what? You have to listen to the customer—what they can afford and what they want, not necessarily what Washington wants or California wants.

Mr. MULLIN. Right.

Mr. Chairman, I yield back.

Mr. SHIMKUS. Gentleman's time has expired. The Chair now recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman, and you have a couple of guys from Texas and one from Oklahoma.

I want to thank the chairman and ranking member for holding this hearing, though. But transportation is a leading source of carbon dioxide emissions.

I have a very urban district in Houston, an industrial district with refineries. By the way, our gasoline over the weekend—the lowest price I found was \$1.99 per gallon, and even with a \$57 barrel of oil, there's a benefit from having a refinery down the road.

But Houston is a car-dependent city. Ninety-four point four percent of all our households have a car, and each household has at least 1.8 cars. My wife and I, I think, share five cars in different locations.

After Hurricane Harvey hit, nearly a million cars will be replaced in the Houston metro area, with analysis estimating that 30 to 40 percent will be new vehicles. The standards are more important than ever when it comes to helping our air quality in Houston.

One of the things I am concerned about, the lower market penetration for electric vehicles anywhere except in California, and we have some in Houston. But, you know, you're not going to drive from Houston to San Antonio—that's 199 miles—on an electric car that may not—you know, you have sit and let it charge up for a few hours when you get there.

So Mr. Bainwol, how has the low price of gas affected purchasing habits among consumers when they come to fuel economy?

Mr. BAINWOL. So, in a profound way. The average age of a car is about 11 years old, and when you think about the improvement in the conventional engine, there's two factors going on.

If you turn in a Camaro for a Camaro or a Civic for a Civic, whatever the case may be, over 11 years you have got about a 25 percent increase in fuel economy, on average.

So you have a combination of two effects. One is the improvement of the engine, and the second is the lower price of gas. The combination of the two has made electrification kind of a niche product, and it's just an economic reality. That may change over time.

But those two factors, the starkness of the improvement and the lower price of gas, combined to really impact penetration.

Electrification of the fleet nationwide in 2017 is 0.5. If you look at the numbers of gas, in '08 it was 97.6 percent of the marketplace. In '17, it's 96.9 percent. It has moved less than a point in a decade.

And what's happening with—electrification is coming out of the hide of hybrids. So we are at a very, very slow uptick in terms of these alternative power trains. At some point it may take off, but we are not there yet.

Mr. GREEN. Well, people will typically vote with their pocketbook. But you're right, you're going to hear all of us have different cars.

Again, I like big trucks, and so in Texas I bought a Tahoe in '06. I couldn't get better than 16 miles per gallon. But the new Tahoe I bought in 2016, we are getting 24 miles per gallon at certain times. And so you're right, it has increased, and people are going to vote with their pocketbook, and unless you can have a product that can do—

And following up, were there any models of vehicles from the same year that an equally priced hybrid version of the vehicles outsold the nonhybrid version?

Mr. BAINWOL. I'm not fully aware of the marketplace to that degree. But there are examples where the hybrid has been priced at the same levels as a conventional engine, and people still choose a conventional engine.

Mr. MCCONNELL. I can think of one particular example. The Lincoln had a hybrid and a nonhybrid priced at identical price. Customer had a choice. Seventy percent chose the nonhybrid, and 30 percent chose the hybrid. Same cost.

Mr. GREEN. Well, that's still better than 5 percent penetration of electric vehicles in California and a half a point for the rest of the country.

Mr. COOKE, regarding the proposed legislation by Representative Upton and Representative Dingell, can we know the full effect that the legislation will have on GHG and CAFE standards while the EPA's midterm review is still not completed?

Dr. COOKE. No. It's difficult to say. All we know is that in the short term it sets it up for long-term failure.

Mr. GREEN. OK. Well, and thank you, Mr. Chairman, for the time, and I guess I batted cleanup today. Thank you.

Mr. SHIMKUS. I think you did. Thank you. Gentleman's time is expired.

Seeing no further Members wishing to ask questions, I would like to thank all of our witnesses for being here today. Before we conclude, I would like to include the following documents to be submitted for the record by unanimous consent.

Mr. Olson's already was taken care of. We have a letter from the Motor and Equipment Manufacturers Association. I think it's been viewed by the minority, and without objection, that gets accepted.

[The information appears at the conclusion of the hearing.]

Mr. SHIMKUS. Pursuant to committee rules, I remind Members that they have 10 business days to submit additional questions for the record, and I ask that witnesses submit their response within 10 business days upon receipt of the questions.

Without objection, the subcommittee is adjourned.

[Whereupon, at 12:08 p.m., the joint subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]



• the ability of health care facilities to provide services in medically underserved areas or to medically underserved populations.

In addition, we will also consider other factors, including, for example, the existence (or nonexistence) of any potential financial benefit to health care professionals or providers that may take into account their decisions whether to (1) order a health care item or service or (2) arrange for a referral of health care items or services to a particular practitioner or provider.

B. Criteria for Developing Special Fraud Alerts

In determining whether to issue additional Special Fraud Alerts, we will consider whether, and to what extent, the practices that would be identified in a new Special Fraud Alert may result in any of the consequences set forth above, as well as the volume and frequency of the conduct that would be identified in the Special Fraud Alert.

Dated: December 21, 2016.

Daniel R. Levinson,
Inspector General.

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Parts 531, 533 and 536

[Docket No. NHTSA-2016-0135]

Corporate Average Fuel Economy Standards; Credits

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Grant of petition for rulemaking.

SUMMARY: This notice partially grants a petition for rulemaking submitted by the Alliance of Automobile Manufacturers and the Association of Global Automakers (hereinafter collectively referred to as “Petitioners”) on June 20, 2016, to consider amending various aspects of the light vehicle Corporate Average Fuel Economy (CAFE) regulations. The Petitioners requested that NHTSA issue a direct final rule to implement the requested changes, but NHTSA believes that the issues and questions raised by the Petitioners are worthy of notice and comment. NHTSA will address the changes requested in the Petition in the course of the rulemaking proceeding, in accordance with statutory criteria.

DATES: December 21, 2016.

FOR FURTHER INFORMATION CONTACT: For technical issues, you may call Mr. James Tamm in the Fuel Economy Division of the Office of Rulemaking at (202) 493-0515. For legal issues, you may call Ms. Rebecca Yoon in the Office of Chief Counsel at (202) 366-2992. You may send mail to these officials at: National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590.

SUPPLEMENTARY INFORMATION: On June 20, 2016, the Petitioners submitted a Petition to the National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) requesting that the agencies issue a direct final rule to amend various aspects of the Corporate Average Fuel Economy (CAFE) and light-duty greenhouse gas (GHG) regulations. The Petitioners stated that these amendments are necessary to “address various inconsistencies between” NHTSA’s CAFE program and EPA’s GHG emissions program, and to “address additional inefficiencies” in the programs.

Specifically, Petitioners requested that NHTSA (and EPA)¹ modify the CAFE regulations as follows:

- (1) Include “off-cycle” credits in the calculation of manufacturers’ fleet fuel economy levels for model years 2010 through 2016;
- (2) Include air conditioning efficiency credits in the calculation of manufacturers’ fleet fuel economy levels for model years 2010 through 2016;
- (3) Apply the “fuel savings adjustment factor” for all uses of CAFE credits;
- (4) Apply the same estimate of Vehicle Miles Traveled for model years 2011 through 2016 that the EPA GHG program uses;
- (5) Change the definition of “credit transfer” in 49 CFR part 536 to state that the statutory cap on credit transfers applies at time of transfer rather than at time of use;
- (6) Amend regulations to clarify that manufacturers may manage and apply their credits regardless of their origin;
- (7) Amend 49 CFR 531(d) so that minimum domestic passenger car standards represent 92 percent of the overall passenger car CAFE standard for the fleet as a whole calculated at the end of each model year, rather than 92 percent of the overall standard as calculated at the time that the standards are/were originally issued;

¹ This decision addresses only those portions of the Petition that are within NHTSA’s jurisdiction and responsibility. It does not address aspects of the Petition that are exclusively under EPA’s jurisdiction.

- (8) Adjust the “multiplier” for full electric vehicles, plug-in hybrid electric vehicles, fuel cell vehicles, and compressed natural gas vehicles; and
- (9) “Improve” the off-cycle credit approval process and reaffirm several provisions.

Some aspects of the Petition were directed to NHTSA, some to both NHTSA and EPA, and other requests were directed exclusively to EPA. The sixth item, seeking clarification that manufacturers may manage and apply their credits regardless of their origin, requests a change in an EPA regulation (40 CFR 86.1865(k)(5)) that does not appear applicable or relevant to the CAFE program. Calculation procedures for CAFE compliance are located at 40 CFR 600.510–12. Credits for CAFE over-compliance are determined based on the difference between a manufacturer’s calculated “achieved” CAFE value and the manufacturer’s calculated “required” CAFE value. NHTSA believes that this request was not intended to be directed at the CAFE program, but NHTSA would welcome Petitioners’ clarification if this is incorrect.

Similarly, the eighth item, which addresses the “multiplier” for alternative fuel vehicles, applies exclusively to EPA’s GHG program. NHTSA does not speak for EPA in this decision, and will not address this item in the upcoming rulemaking.

The remaining items will be addressed in conjunction with the Agency’s upcoming proposal for setting future CAFE standards. NHTSA believes that these issues are best considered concurrently with that rulemaking for both procedural and substantive reasons. Procedurally, reducing the number of rulemaking actions increases administrative efficiency and improves the ability to evaluate cumulative program impacts comprehensively. Substantively, while Petitioners’ requests nominally focus on credit and flexibility issues, NHTSA believes that the underlying questions of whether and how to expand compliance flexibilities is closely related to the question of what CAFE standards are maximum feasible in future model years, which NHTSA will determine in the upcoming rulemaking as required by statute. The Petitioners appear to agree with this, as the Petition suggests that if a lack of compliance flexibilities leads manufacturers to pay civil penalties for CAFE non-compliance, the CAFE standards may be beyond maximum feasible levels. While NHTSA does not agree that the fact that *any* manufacturer would face civil penalties alone would suggest that CAFE standards would be

beyond maximum feasible, the Agency does agree that manufacturers' ability to comply with standards is a vital consideration in any CAFE rulemaking.

Thus, NHTSA finds that considering these questions concurrently, as part of the same action, will best allow the Agency to maintain a well-structured program that maximizes fuel economy gains in the most cost-effective way possible. NHTSA further concludes that a direct final rule would not be an appropriate mechanism for responding to Petitioners' requests, because: (i) The opportunity for notice and public comment on the Agency's response is important and valuable, particularly given (ii) the linkage between compliance flexibilities and the maximum feasible levels of CAFE standards. Moreover, NHTSA regulations do not allow for a direct final rule to be issued as such if the rule may be controversial or is likely to result in adverse comment. NHTSA is aware that various stakeholders have strong views for and against the expansion of compliance flexibilities in the CAFE program, and the Agency would expect those stakeholders to comment to a direct final rule

accordingly, which would require the Agency per its own regulations to initiate notice and comment. *See* 49 CFR 553.14. Thus, NHTSA denies the petition to the extent that it seeks a direct final rule.

NHTSA's fuel economy standards are final through 2021 and the upcoming rulemaking is required in order to set standards for 2022 and subsequent years. However, in streamlining consideration of the Petitioners' inquiry with the required NPRM, NHTSA will fully evaluate the items relevant to the CAFE program and standards, including their impacts on the program if applied prior to 2022. If in considering the Petitioner's inquiry, NHTSA finds it appropriate to initiate a separate rulemaking, NHTSA may do so. NHTSA is updating its analysis for the NPRM and welcomes input from all stakeholders, including in advance of developing its notice of proposed rulemaking. NHTSA encourages stakeholders to submit comments and to meet with the Agency to discuss their comments, concerns, and suggestions. NHTSA and EPA remain committed to working together to harmonize the CAFE and GHG program provisions to

the extent possible under the agencies' statutes.

Considering all of the information before the Agency, including but not limited to the information referenced in the petition, NHTSA grants the petition in part and denies it in part. The Agency expects to initiate a rulemaking proceeding in the coming months that will address those of the Petitioners' requests that are within the Agency's jurisdiction and power to address. The granting of the petition does not mean that the Agency will issue a final rule. The determination of whether to issue a rule will be made after study of the requested actions and the various alternatives in the course of the rulemaking proceeding, in accordance with statutory criteria.

Authority: 49 U.S.C. 32901, 32902, and 32903; delegation of authority at 49 CFR 1.95.

Issued on December 21, 2016, in Washington, DC, under authority delegated in 49 CFR 1.95, 501.5, and 501.7.

Raymond R. Posten,

Associate Administrator for Rulemaking.
[FR Doc. 2016-31140 Filed 12-27-16; 8:45 am]

BILLING CODE 4910-59-P

Motor & Equipment Manufacturers Association
 1030 15th Street, NW Suite 500 East Washington, DC 20005
 Tel 202.393.6362 Fax 202.737.3742 E-mail info@mema.org



December 11, 2017

The Honorable John Shimkus
 Chairman
 Subcommittee on Environment
 United States House of Representatives
 Washington, D.C. 20515

The Honorable Bob Latta
 Chairman
 Subcommittee on Digital Commerce and
 Consumer Protection
 United States House of Representatives
 Washington, D.C. 20515

RE: December 12, 2017 Joint Hearing: "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles"

Dear Chairmen Shimkus and Latta:

The Motor & Equipment Manufacturers Association (MEMA) represents more than 1,000 vehicle suppliers that manufacture and remanufacture components and systems for use in passenger cars and heavy trucks providing original equipment (OE) to new vehicles as well as aftermarket parts to service, maintain and repair vehicles on the road today.¹ The motor vehicle components manufacturing industry is the nation's largest direct employer of manufacturing jobs – employing over 871,000 workers in all 50 states – and contributes nearly \$435 billion to the U.S. GDP. Suppliers are responsible for providing the technologies and components that make up more than 77 percent of the value of a new vehicle.

MEMA submits the following statement regarding the cited subject for the record and for the subcommittees' consideration. While MEMA supports pragmatic progress for the model years' (MYs) 2022–2025 standards, MEMA strongly opposes any change to the MY2021 standards. Major changes to the Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) vehicle emissions standards would result in significant ramifications on supplier jobs as well as business and technology investments. Suppliers have developed, and will continue to develop, the needed emissions-reducing and fuel efficiency technologies to fruition. A forward direction of the standards is paramount to the supplier industry and ensures that the U.S. continues to be a technological leader in the global motor vehicle industry. Progress on the standards allows consumers a broader range of advanced technologies that provide consumers fuel efficiency and relief at the pump.

Suppliers Role and Support of the One National Program

Motor vehicle suppliers play the leading role in developing and manufacturing the innovative technologies and materials that improve vehicle fuel efficiency and reduce vehicle emissions. Suppliers anticipate the needs of vehicle manufacturers by investing, developing, and deploying multiple technology solutions that are critical to the vehicle manufacturers' strategies in meeting the GHG emissions targets.

¹ MEMA represents vehicle suppliers through the following four divisions: Automotive Aftermarket Suppliers Association (AASA), Heavy Duty Manufacturers Association (HDMA), Motor & Equipment Remanufacturers Association (MERA) and Original Equipment Suppliers Association (OESA).



MEMA Statement for the Record; Joint Hearing on CAFE and GHG
December 11, 2017

MEMA strongly supports the One National Program implemented by the U.S. Environmental Protection Agency (EPA), the National Highway Traffic Safety Administration (NHTSA), and the California Air Resources Board (ARB). The One National Program provides suppliers regulatory stability and certainty. A National Program of unified targets and timelines is critical to allow motor vehicle suppliers to continually innovate and advance research into commercially viable products and technologies. Anything that falls short of a National Program will fail to provide the long-term planning certainty the industry needs to make long-term business and technology investment decisions.

**MEMA Supports Forward Progress on the Standards for MYs 2022–2025,
Opposes any Change to the MY2021 Standards**

MEMA supports continued progress in the MYs 2022–2025 standards. Major changes to the stringency of these standards would result in significant impacts to the supplier industry and its long-term business and technology investments. It is imperative that the agencies set the CAFE and GHG vehicle emissions standards that allow the vehicle industry as a whole to grow, innovate, and create jobs. However, this measure includes the potential economic implications to all sectors within the vehicle industry ecosystem, including suppliers.

The EPA and NHTSA have made clear that the agencies are considering input on whether the light-duty vehicle GHG and CAFE standards established for MY2021 remain appropriate.² MEMA opposes any change to the MY2021 standards. The agencies must remain on course for the MY2021 standard, as this was the target committed to by the agencies and the industry in the 2012 final rule. A shift to the MY2021 standard would significantly increase the level of uncertainty for the supplier industry in an already uncertain time. Suppliers have completed and have ongoing extensive investments in research and development to bring needed emissions-reducing technologies to fruition that enable the vehicle manufacturers to meet the 2021 standards. Therefore, MEMA urges the subcommittees to support the MY2021 standard that was set in the 2012 rule and recommends that policymakers focus on evaluating the CAFE and GHG standards for MYs 2022–2025.

Risk for Supplier Investments and Resources

Suppliers will be at great risk if there is any shift to the MY2021 standards or major changes to the program through MY2025 because of the investments they have already made. Typically, suppliers take on the initial investments and the associated risks to develop innovative technologies for their vehicle manufacturer customers, who are concurrently planning for their own future vehicle design cycles. The roll-out of these technologies requires major economic resources and significant lead-time. Suppliers' product planning and investment costs include stages, such as:

- product concept research;
- engineering development for the part or system;
- design of the manufacturing process;
- customer validation of part or system prior to production;
- production facility updates; and, finally,
- product production and deployment.

Each of these stages can range anywhere from six months to two years, depending on many variables. As a result, the timeline from the initial investment in the research and development by the supplier to deployment of the technology can span up to 10 years. Suppliers are not paid by their customers until these technologies are deployed in a vehicle being manufactured. These costs must be amortized over several

² 82 Fed Reg 39552

MEMA Statement for the Record; Joint Hearing on CAFE and GHG
December 11, 2017

years, so delaying a product deployment or shortening a product's anticipated lifespan will jeopardize these carefully planned technology investments put in place several years in advance.

Suppliers have made long-term investment decisions based on the CAFE and GHG standards set in the 2012 rulemaking. In fact, automotive suppliers have seen an overall 19 percent increase in employment since 2012 – an employment growth rate three times that of any major manufacturing sector in the nation. Further, original equipment suppliers have seen an even higher increase in employment – 23 percent since 2012. This jump can partly be attributed to advanced technology development spurred by the 2012 rulemaking.

Suppliers are actively investing in technologies that will enable the U.S. vehicle industry to meet emissions and fuel efficiency standards. Content from suppliers make up more than 77 percent of the value of a new vehicle. Out of the 7.25 million direct and indirect jobs in the vehicle manufacturing sector, suppliers create 44 percent of those jobs compared to the vehicle manufacturers' 33 percent and auto dealers' 23 percent.³ Accounting for 2.9 percent of the total U.S. employment market directly employing 871,000 workers with a total employment impact of 4.26 million jobs, suppliers are the largest sector of manufacturing jobs in the nation.⁴ Many of these supplier sector jobs have been contingent on technology advancement for compliance with the vehicle GHG and CAFE standards.

Supplier direct employment in the U.S. is highest in Michigan, Ohio, and Indiana. But importantly, the Southeast region has seen the highest growth over the past few years and now accounts for one-third of all supplier employees.⁵ Suppliers employ workers in all 50 states. Thus, an economic impact to the motor vehicle supplier industry would affect all corners of the U.S.

Relaxing the stringency of the MY2021 standard and making major changes to the MYs 2022–2025 standards would cause detrimental adverse economic impacts – including job losses – to the substantial investment levels to which suppliers committed in 2012. These investments of extensive research and development, human capital, and manufacturing equipment and facilities have been made by all suppliers – tier 1, 2, and 3 suppliers and beyond – to satisfy GHG emissions requirements and CAFE standards. Suppliers support research activities with the U.S. Department of Energy, the National Laboratories, and several universities to bring these and future emissions-reducing technologies to fruition. Changes to these standards would significantly impact the supplier industry with stranded costs and investments and impact the product cycle, which in turn will impact revenue needed for future technological innovation. Policymakers must weigh these economic and employment factors when determining the impact to industry if standards are changed. A failure to consider these adverse implications for the supplier industry would be contrary to the spirit of a robust midterm evaluation.

A Range of Technologies Exists Today

As EPA and NHTSA concluded in the 2016 draft Technical Assessment Report (TAR), the supplier industry is currently providing a range of technologies that could be used to achieve the MYs 2022–2025

³"Cars Move America: State of the Auto Industry" available here: https://autoalliance.org/wp-content/uploads/2017/01/2016_Cars_Move_America_Report.pdf, Alliance of Automobile Manufacturers, 2016

⁴"Driving the Future: The Employment and Economic Impact of the Vehicle Supplier Industry in the U.S." Available here: https://www.mema.org/sites/default/files/MEMA_ImpactBook.pdf, MEMA, 2016

⁵Id, pg. 8.

MEMA Statement for the Record; Joint Hearing on CAFE and GHG
December 11, 2017

standards.⁶ Further, since data was gathered for the TAR, there are, and will continue to be, emerging technologies that are being pursued by suppliers that will be available in the 2022-2025 timeframe that could provide further options for vehicle manufacturers.⁷ Moreover, suppliers continue to improve a myriad of technologies as industry pushes innovation – specifically, more capable 48 volt systems, higher efficiency turbo engines, various advances in thermal management and control technologies, and new composites and materials for improved light weighting.

Risk of Putting U.S. Companies at a Competitive Disadvantage


U.S. companies are leading the way in providing the innovative emissions-reducing technology necessary for vehicle manufacturers to meet the U.S. and other forward-moving global standards. Significantly relaxing the stringency of the MYs 2022–2025 standards would put U.S. companies at a competitive disadvantage. This is because the U.S. has been a leader in progressive vehicle GHG emissions reduction targets. Reducing the stringency of the standards in the U.S. increases the likelihood that work on these emissions-reducing technologies would shift to other markets. In an increasingly competitive global marketplace, a shift in the GHG standards would tilt the balance away from American innovation, where U.S. companies currently have a competitive edge. If Europe and China progress ahead of the U.S. in the targets, it would result in a scenario where investments that would have been made in the U.S. will instead go to China or the EU. This will result in a loss of U.S. jobs and innovative technology development.

The National Program's long-term targets have provided the domestic supplier industry with significant economic and technology development opportunities and have been key to U.S. companies' global leadership in these technologies. MEMA urges the subcommittees to ensure that the U.S. continues to be a global leader in these emissions-reducing technologies and further enhance U.S. competitiveness in the motor vehicle industry worldwide.

Conclusion

MEMA urges against changes to the MY2021 standards and supports continued forward progress in the CAFE and GHG vehicle standards in MYs 2022–2025. Major shifts in these standards would impact the supplier industry by causing major investment disruption including stranded costs and investments; result in adverse economic effect including loss of jobs; and threaten the U.S. global leadership position in the motor vehicle industry. Any changes to these standards must consider implications to the supplier industry.

Please contact Catherine Boland, vice president of legislative affairs at (202) 312-9241 or cboland@mema.org or Laurie Holmes, senior director of environmental policy at (202) 312-9247 or lholfmes@mema.org with any questions.


Ann Wilson
Senior Vice President, Government Affairs

⁶ 2016 Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards for Model Years 2022–2025, ES-6 – ES-7. Docket Nos. EPA-HQ-OAR-2015-0827; NHTSA-2016-0068.

⁷ *Ibid.*

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS
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House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
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February 2, 2018

Mr. Mitch Bainwol
President and CEO
Alliance of Automobile Manufacturers
803 7th Street, N.W.; Suite 300
Washington, DC 20001

Dear Mr. Bainwol:

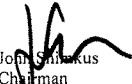
Thank you for appearing before the Subcommittee on Environment and the Subcommittee on Digital Commerce and Consumer Protection on December 12, 2017, to testify at the joint hearing entitled "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

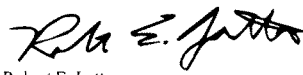
Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Friday, February 16, 2018. Your responses should be mailed to Allie Bury, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Allie.Bury@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,


John Shimkus
Chairman
Subcommittee on Environment


Robert E. Latta
Chairman
Subcommittee on Digital Commerce
and Consumer Protection

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

The Honorable Janice D. Schakowsky, Ranking Member, Subcommittee on Digital Commerce and Consumer Protection

Attachment



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February 16, 2018

Allie Burry
Legislative Clerk
Committee on Energy and Commerce
U.S. House of Congress
2125 Rayburn House Office Building
Washington, DC 20515

Re: December 12, 2017 joint hearing entitled, "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

Dear Ms. Burry,

In response to Chairman Shimkus' and Chairman Latta's letter of February 2, 2016, attached you will find responses to the additional questions directed to Mitch Bainwol in relation to the joint hearing of the Subcommittee on the Environment and the Subcommittee on Digital Commerce and Consumer Protection held on December 12, 2017.

Sincerely,



Jennifer Thomas
Vice President, Federal Government Affairs
Alliance of Automobile Manufacturers

Attachment

Attachment

Re: December 12, 2017 joint hearing entitled, "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

Question for the Record from the Honorable Richard Hudson:

1. Mr. Bainwol, during the hearing we spent a fair amount of time discussing the Obama Administration's final Mid-Term Evaluation. We have heard that the original target for this report was April of 2018, but instead it was released over a year early in January 2017. To say that this was rushed, I think, is a dramatic understatement.
 - a. If the EPA did take the additional year to gather information from all stakeholders, what do you think the final outcome would have been?
 - b. How do you think this would have impacted the industry as a whole and their goal to reduce emissions while creating consumer friendly vehicles?

Alliance Response:

- a. The Auto Alliance and our members would agree – characterizing the final determination as "rushed" is an understatement. That determination was to be issued jointly by the Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) no later than April 2018 and the agencies had repeatedly represented that they would not complete a Proposed Determination/NPRM until mid-2017, at the earliest. By rushing to issue the proposed determination after the November election and the final determination just days before the previous Administration left office, the previous EPA ignored key data such as:
 - consumer purchase trends showing an increased shift away from passenger cars and into crossover utility vehicles (CUVs), sport utility vehicles (SUVs), and light-duty trucks,
 - regulatory compliance challenges faced by automakers as a result of this shift in consumer buying habits,
 - continued low adoption of advanced technology vehicles and;
 - updated data on gas prices, technology cost and effectiveness.

In their flawed determination, the previous EPA relied on incomplete and outdated data demonstrating that the auto industry, on average, outperformed its targets during the first four years of the light-duty vehicle GHG program (MYs 2012-2015) as justification to maintain the aggressive MY 2022-2025 GHG emissions standards. However, had they waited to consider more up-to-date information, they would have seen that compliance trend data – including the feasibility of meeting the standards, projections on compliance, and the credit system – are increasingly indicating that it is not feasible to meet the MY 2022-2025 GHG emission standards as originally envisioned when they were published back in 2012.

For example, EPA's recently released 2016 GHG Manufacturer Performance Report and the 2017 Fuel Economy Trends Report continues to demonstrate that more and more automakers are not able to comply with MY 2016 and 2017 standards – effectively disputing the EPA's previous final determination. In short, the auto industry on average is no longer meeting its targets. These two reports show that in

Attachment

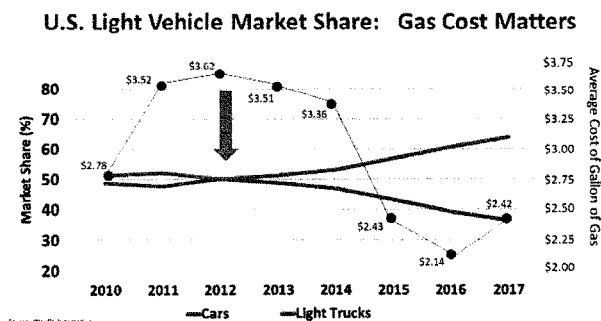
Re: December 12, 2017 joint hearing entitled, "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

MY 2016 – for the first time ever – the U.S. light-duty vehicle fleet missed compliance targets by nine grams per mile of carbon dioxide. The 2016 Compliance Report shows that 10 companies – up from four in 2015 – will need to either purchase credits or use prior over compliance to offset the 2016 MY shortfalls. Keep in mind, in MY 2016 the light-duty fleet set not only an all-time fuel economy record and greenhouse gas reduction but still fell short of the standards originally published in 2012.

Concerns over the deepening under compliance are exacerbated by the 2017 Fuel Economy Trends Report. EPA notes that "vehicles meeting the MY 2025 CO₂ targets are comprised solely of hybrids, plug-in hybrids, electric vehicles, and fuel cell vehicles", despite being only eight years away from 2025. In EPA's 2017 Final Determination, they projected relatively few strong hybrids and plug-in hybrid electric vehicles (PHEVs) would be needed to meet the MY 2025 targets, yet we are not seeing any non-electrified vehicles that can meet future standards. Even if such "conventional" powertrains were developed tomorrow that could meet the MY 2025 targets, reaching significant fleet penetration of the new, yet to be seen powertrains, is questionable.

Low gasoline prices have been a significant factor in both the dramatic shift in consumer demand away from passenger cars to CUVs and SUVs and the low adoption of advanced technology vehicles. In the agencies' original analysis of the 2012 Joint Final Rule (covering MY 2017-2025), they predicted gas prices would be \$3.87 in 2010 dollars by 2025, or about \$5 a gallon. This projection was made in August of 2012, when the average price of gas was \$3.72 a gallon. According to AAA, the average price of gas in January of 2018 was \$2.49 a gallon and in its *2018 Annual Energy Outlook*, the U.S. Energy Information Administration continues to project gas prices to remain relatively low through 2030. This low gas price environment has resulted in an unanticipated shift in the light-duty fleet mix from passenger cars towards light trucks (see Figure 1). In 2017, passenger cars comprised only 36.4% of the vehicle market and Edmunds predicts that decline in market share will continue in 2018, projecting a record low market share of 34.5% for passenger cars – down 15.5% in just six years.¹

Figure 1:



¹ Edmunds, *2018 Automotive Industry Trends*, <https://static.ed.edmunds-media.com/unversioned/img/industry-center/analysis/2018-Industry-Trends.pdf>.

Attachment

Re: December 12, 2017 joint hearing entitled, "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

The current low gas price environment has impacted the sales of advanced technology vehicles, as well, despite automakers offering an increasing amount of models for sale in dealer showrooms nationwide, including roughly 50 hybrid models and 30 EV models. Through October 2017, the calendar year 2017 U.S. sales share of zero-emission vehicles (ZEVs) (battery electric, plug-in electric and fuel cell electric vehicles) was 1.15%², approximately one-fifth of the level projected by EPA for MY 2025.

As the Mid-term Evaluation process moves forward, the Alliance has encouraged the agencies to fully examine the factors noted above in evaluating the feasibility of the MY 2022-2025 standards. Such data is precisely the up-to-date information the previous Administration either chose to ignore or would have had available to consider had it not truncated the MTE in January 2017.

b. Had the Trump Administration not reinstated the MTE process in March of 2017, the previous determination would have ignored market realities and the corresponding regulatory compliance trends. Among the significant ramifications, this would have adversely impacted consumer affordability and choice – resulting in a decline in vehicle sales and production, as well as an increase in the age of vehicles on the roadway.

If consumers have difficulty affording or financing the increasingly expensive vehicle technologies required for compliance, then they are more inclined to keep their current, less efficient vehicle longer or purchase in the used market. In either case, the cycle of fleet turnover is hindered – resulting in disruption to the industry and national economy, delaying the introduction of advanced vehicle safety and fuel-efficient technologies to consumers, and reducing the environmental and safety benefits of all standards relying on fleet turnover.

A decline in vehicle sales is not only bad for the environment, since older, less-efficient vehicles remain on the road, it is also bad for employment in the auto industry. There is a direct correlation between auto sector employment and vehicle sales; the higher the sales, the higher the level of employment. When new vehicle sales drop as they did in 2017, automakers and suppliers begin to scale back production, resulting in eliminated shifts and employee lay-offs. Such a downturn in the auto industry has a cascading effect on the broader U.S. economy.

As such, we very much appreciate the announcement made on March 15, 2017, by President Trump, along with Department of Transportation Secretary Elaine Chao and EPA Administrator Scott Pruitt, that EPA would revisit the previous determination and restore the Mid-term Evaluation process. That process is back on track with a determination on the appropriateness of the standards expected by April 2018.

²Auto Alliance, *ZEV Sales Dashboard: ZEV Market Share*, <https://autoalliance.org/energy-environment/zev-sales-dashboard/>.

GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS
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Majority (201) 225-2927
Minority (202) 225-3641
February 2, 2018

Mr. Forrest McConnell, III
President
McConnell Honda and Acura
2840 Eastern Boulevard
Montgomery, AL 36116

Dear Mr. McConnell:

Thank you for appearing before the Subcommittee on Environment and the Subcommittee on Digital Commerce and Consumer Protection on December 12, 2017, to testify at the joint hearing entitled "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Friday, February 16, 2018. Your responses should be mailed to Allie Bury, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Allie.Bury@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,


John Shimkus
Chairman
Subcommittee on Environment


Robert E. Latta
Chairman
Subcommittee on Digital Commerce
and Consumer Protection

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment

The Honorable Janice D. Schakowsky, Ranking Member, Subcommittee on Digital Commerce and Consumer Protection

Attachment

Attachment—Additional Questions for the RecordThe Honorable Richard Hudson

- i. In your testimony you highlighted how the Obama One National Program was one of the most expensive set of rules ever on the auto industry. You also sighted{sic} how these rules raised the average price of a vehicle by nearly \$3,000 forcing over 6 million people entirely out of the new car market.
 - a. If these people are priced out of the new car market is it safe to assume that these individuals will turn to older vehicles?
 - b. If customers do turn to older vehicles after being forced out of the new car market, could you share your thoughts on the impact this would have both on the environment and long term economic effects for both consumers and manufacturers?

Response by Forrest McConnell, former Chairman, NADA

- a. We agree that Americans priced out of the new car market because of the Obama Administration's fuel economy rules will be forced to turn to alternatives, such as purchasing older vehicles or repairing and retaining the older vehicles that they already own. Because 90 percent of new car buyers rely on financing to acquire new vehicles, a 2012 National Automobile Dealer Association (NADA) study investigated how increased vehicle prices affect consumers' ability to secure vehicle financing. Since lending sources will not lend more based on a vehicle's higher fuel economy, the study unsurprisingly found that the higher vehicle prices that accompany fuel economy increases will force some potential new car buyers entirely out of the new car market, simply because they will no longer qualify for a new car auto loan. Using the government's \$3,000 per vehicle price increase estimate, the study found that 6.8 million licensed drivers will no longer be able to qualify for the least expensive new vehicle on the market. A \$3,000 per vehicle price increase will also impact other parts of the automobile market. For example, 6.6 million licensed drivers would be unable to qualify for a seven-passenger family vehicle.

If an individual is priced out of the new car market or a particular market segment, some alternatives are the used car market or public transportation. However, raising the price of new vehicles often results in a commensurate rise in the price of used vehicles. Regarding public transportation, that option is often not available – or is extremely limited – for many working Americans. The Obama fuel economy program is making new cars and trucks more expensive, resulting in Americans keeping their older vehicles longer, and delaying the ability of consumers to purchase newer, safer, and more fuel-efficient vehicles.

- b. As a general matter, older vehicles are less safe and less environmentally friendly than new vehicles. Unfortunately, the way the "One National Program" is currently structured, the EPA and the California Air Resources Board do not evaluate how their

regulations affect consumer choice, safety or jobs. Regarding the long term economic effects of this policy, the Obama Administration largely glossed over the costs of its rule. For example, the rule does, “not provide quantified estimates of potential sales impacts...” 77 Fed. Reg. 62946 (Oct. 15, 2012). Regarding potential job loss, the rule states, “Because... we have not quantified the impact on sales for this rule, we do not quantify the demand effect [on employment].” 77 Fed. Reg. 62955 (Oct. 15, 2012).

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CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
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February 2, 2018

Dr. Dave Cooke
Senior Vehicles Analyst
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Union of Concerned Scientists
1825 K Street, N.W.; Suite 800
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Dear Dr. Cooke:

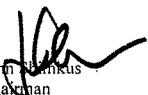
Thank you for appearing before the Subcommittee on Environment and the Subcommittee on Digital Commerce and Consumer Protection on December 12, 2017, to testify at the joint hearing entitled "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse Gas Emissions Standards for Motor Vehicles."


Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Friday, February 16, 2018. Your responses should be mailed to Allie Bury, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, DC 20515 and e-mailed in Word format to Allie.Bury@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,


John Rankus
Chairman
Subcommittee on Environment


Robert E. Latta
Chairman
Subcommittee on Digital Commerce
and Consumer Protection

cc: The Honorable Paul Tonko, Ranking Member, Subcommittee on Environment
The Honorable Janice D. Schakowsky, Ranking Member, Subcommittee on Digital Commerce and Consumer Protection
Attachment

Committee on Energy and Commerce, House of Representatives
 Subcommittee on Environment and Subcommittee on Digital Commerce and Consumer Protection
 Joint hearing entitled "Update on the Corporate Average Fuel Economy Program (CAFE) and Greenhouse
 Gas Emissions Standards for Motor Vehicles," held December 12, 2017

Questions for the Record for Dr. David W. Cooke

To the Honorable Jan Schakowsky, please find below responses (sans serif) to your questions (in bold).

1. **Please discuss the various options that manufacturers have for maintaining a fleet that complies with Environmental Protection Agency (EPA)'s emissions standards, National Highway Traffic Safety Administration (NHTSA) fuel economy standards, and California Air Resources Board (CARB)'s emissions standards?**
 - a. **Can a manufacturer comply with those standards if its fleet does not include electric vehicles?**

All agency modeling by CARB, NHTSA, and EPA shows that manufacturers can comply with the federal standards predominantly with gasoline-powered vehicles. Similarly, independent analysis from a panel of experts at the National Academies of Science, Engineering, and Medicine confirmed this finding, noting that "the gasoline-fueled spark ignition engine will continue to be the dominant powertrain configuration even through 2030."¹ Even analysis paid for by automakers themselves shows that the standards can be met primarily through the deployment of gasoline-powered vehicles.^{2,3}

The choices available to each manufacturer to improve conventional vehicles are plentiful, and the agencies modeled a wide range of technology and cost assumptions which may favor different deployment strategies—however, the costs of compliance did not vary significantly between these scenarios. Below is a non-exhaustive list of some key technologies, their approximate potential for improvement, and the fraction of vehicles on the road today with such technology. As Table 1 shows, there are many known technologies which have yet to be widely deployed, offering significant opportunities for fuel reduction from conventional gasoline-powered vehicles (for reference, the 2017-2025 standards now on the books would require a reduction in fuel consumption of about 30 percent, without the use of any off-cycle or banked credits).

Of course, Table 1 is meant merely to be illustrative of the range of potential technologies—in order to fully assess the potential effectiveness of a particular technology package, it is better to do full-vehicle simulation, which can take into account interactions of different technologies and provide a more

¹ "Cost Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles," Committee on the Assessment of Technologies for Improving Fuel Economy of Light-Duty Vehicles, Phase 2, Board on Energy and Environmental Systems, Division on Engineering and Physical Sciences, National Research Council of the National Academies. National Academies Press: Washington, DC (2015).

² "Technology Effectiveness—Phase 1: Fleet-level Assessment (v. 1.1): Final Report," Novation Analytics, prepared for the Alliance of Automobile Manufacturers and Association of Global Automakers, October 19, 2015.

³ "Decomposing fuel economy and greenhouse gas regulatory standards in the energy conversion efficiency and tractive energy domain," Greg Pannone, Brian Betz, and Michael Reale (Novation Analytics) and John Thomas (Oak Ridge National Laboratory), *SAE International Journal for Fuels and Lubricants*, volume 10(1) 202-216, 2017. DOI: 10.4271/2017-01-0897.

accurate assessment of the potential for improvement. And, in fact, the agencies have done exactly that, to ensure the robustness of their modeling results—EPA utilizes its own, publicly available ALPHA model, which it has benchmarked against the most advanced vehicles on the road today thanks to its in-house work at the National Vehicle and Fuel Emissions Laboratory in Ann Arbor; NHTSA has contracted for its own simulation work with Argonne National Laboratory to assess the performance of future technology packages which informs its Volpe modeling.

Table 1. Technology pathways to improve gasoline-powered vehicles through 2025.

Technology	Fuel consumption reduction (%)	Penetration in MY2017 fleet (%)	Remaining potential improvement (%) [§]
(Dynamic) cylinder deactivation	6.5-8.3% ⁴	(0%) ^{§§} 12.3% ⁵	5.7-7.3%
(48V) stop-start	3.0-8.5% ¹	(0%) ^{§§} 16.8% ⁵	2.5-7.9%
Turbocharged, downsized engines	6.8-11.5% ¹	25.2% ²	5.1-9.3%
Cooled exhaust gas recirculation (EGR)	3.0-4.9% ¹	0% ⁶	3.0-4.9%
High compression ratio engine (Atkinson/Miller)	10% ¹	1.8% ⁶	8.1%
High-ratio transmissions (advanced CVT or 8+ speed)	3.5-6.5% ¹	50% ⁵	3.7-5.4%
Improved accessories	1.0-3.8% ¹	0% ⁶	1.0-3.8%
Mass reduction (lightweighting)	6.1-11.2% ¹	—1.4-3.7% (% wt.) ⁶	6.5-9.6%
Drag reduction (improved aerodynamics, brakes, tires)	4.2-9.2% ¹	6.0% ⁶	6.4-9.0%
Estimated potential reduction in fuel use from just these technologies:			29.5-44.9%

[§] Remaining potential improvement includes further improvement from some vehicles in the fleet with the technology already deployed for technologies like transmissions or mass reduction for which further improvements are foreseen. The estimated total potential includes Atkinson engines without cooled EGR at the low end and turbocharged engines with cooled EGR at the upper end, since these engine technologies are not additive. Similarly, the potential improvement for each of these engine strategies factors in the penetration of the other.

^{§§} Dynamic cylinder deactivation and 48V stop-start systems offer significant opportunity beyond the conventional cylinder deactivation and stop-start, respectively; however, neither technology is present in today's fleet, as noted in the parentheses.

Combining detailed simulation of vehicle technology packages with the fleet-level analysis of EPA's OMEGA model and NHTSA's Volpe/CAFE Model, this thorough and complementary work shows quite clearly the ability for the vehicle fleet to meet future light-duty fuel economy and emissions standards predominantly through the deployment of gasoline-powered vehicles. Showcased first in the Joint Draft Technical Assessment Report released in June 2016 and affirmed in EPA's work supporting its Final

⁴ "Efficiency technology and cost assessment for U.S. 2025-2030 light-duty vehicles," International Council on Clean Transportation. March 2017.

⁵ "Light-duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 through 2017," Environmental Protection Agency. January 2018.

⁶ Volpe CAFE Model 1.2016.6.1, Build 5/2/17. 2015 baseline data.

Determination in January 2017, accompanied by thousands of pages of documented technical evidence, this comprehensive technical work continues to show that manufacturers can meet the standards without significant deployment of electric vehicles.

b. How does compliance with the Zero Emission Vehicle program affect manufacturers' compliance with EPA, NHTSA, and CARB's emissions and fuel economy standards?

State Zero Emission Vehicle standards are in place in more than one-quarter of the new vehicle market (CA, CT, MA, MD, ME, NJ, NY, OR, RI, VT). These standards assure a minimum fraction of new vehicles are sold with a plug and represent a key step in these states to improving air quality and reducing transportation emissions. Any vehicles sold in order to comply with these state requirements will be counted towards compliance with the federal vehicle standards.

In fact, incentives are available under both the NHTSA and EPA programs to drive adoption of electric vehicles. Under the CAFE program, the petroleum equivalency factor results in electric vehicles having a fuel economy equivalent to greater than 300 miles per gallon. Under the EPA program, electric vehicles are currently treated as though the lifetime emissions were 0 g/mi, despite the fact that emissions are generated from the electricity powering these vehicles. Moreover, beginning in 2017, electric vehicles also get to take advantage of a vehicle multiplier, which counts the sales of electric vehicles as greater than what were actually sold (for example, if a manufacturer sells a battery electric vehicle in 2017, for compliance purposes it is as though they sold 2 battery electric vehicles, not 1).

All electric vehicles required under the Zero Emission Vehicle program take advantage of these incentives—this greatly reduces the difficulty for manufacturers to meet their federal requirements with the remaining vehicles.

2. Is it possible for manufacturers to comply with the EPA, NHTSA, and CARB standards if they are selling more SUVs than traditional passenger cars? Is compliance more difficult?

More drivers are buying sport utility vehicles (SUVs) than ever before.⁷ However, the fuel economy and greenhouse gas standards are tailored to ensure that the vehicles that automakers make and consumers purchase does not make compliance more difficult—a change in the relative number of the types of vehicles sold does not negatively impact auto manufacturers.

Rather than setting a single fuel-economy target for the average vehicle sold by a manufacturer, which is what previous vehicle standards did, the vehicle standards required by the Energy Independence and Security Act of 2007 consider the size and type of the vehicles sold. Larger vehicles generally require more energy and therefore have lower regulatory targets. For example, if Ford only sold its F-150 in

⁷ "U.S. Light Vehicle Sales by Segment Group, 1998-2017," WardsAuto.

2025, the company's targets would be just 32.0 mpg and 261 g/mi,⁸ much lower than the industry's future projected targets of 46.3 mpg and 175 g/mi, based on expected vehicles sales.⁹

This policy also encourages automakers to offer efficient vehicles in all sizes and types. A manufacturer whose vehicles achieve their respective targets is well positioned to comply with the regulations, regardless of sales volume in a given year. This means that the automakers benefit from offering more efficient options for consumers across all vehicle types. The latest data shows that the efficiency of cars and trucks on average continues to improve. In fact, SUVs have shown the greatest levels of individual improvement year-over-year.¹⁰

3. It has been suggested that if a manufacturer is in compliance with either EPA, NHTSA, or CARB's standards, they should be deemed in compliance with all three because the "One National Program" promised harmonization.

a. Why is this suggestion problematic? What was the promise made when One National Program was established?

Prior to "One National Program", California had already set its own size-independent vehicle emissions standards through 2016.¹¹ At the same time, the findings of *Massachusetts v. EPA* required that EPA set federal greenhouse gas standards for passenger vehicles,¹² and the Energy Independence and Security Act of 2007 required that NHTSA set "maximum feasible" CAFE standards which would achieve a fleet-wide fuel economy of at least 35 mpg by 2020. California coordinating with federal regulators under "One National Program" helped assure manufacturers that they could develop a fleet which would comply with standards in all 50 states.

The promise made to manufacturers was crystal clear from the very beginning in 2009:

"The intent of this coordinated program is to allow auto manufacturers to build a single light-duty national fleet that provides significant reductions in both greenhouse gases and oil consumption."¹³

This was made even more explicit in the finalized rule for 2012-2016, in particular what it means for the program to be harmonized:

"EPA is finalizing greenhouse gas emissions standards under the Clean Air Act, and NHTSA is finalizing Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act, as amended. These standards apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016, and represent a harmonized and consistent National Program. Under the National Program, automobile manufacturers will be

⁸ Based on production-weighted footprint of all versions of the F-150.

⁹ "Draft TAR: Midterm Evaluation of LDV Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022-2025," EPA, NHTSA, and CARB, July 2016. EPA-420-D-16-900.

¹⁰ EPA Trends report (see fn 1)

¹¹ "California exhaust emission standards and test procedures for 2001 and subsequent model passenger cars, light-duty trucks, and medium-duty vehicles," as amended on August 4, 2005, California Environmental Protection Agency Air Resources Board.

¹² Provided that it be determined that greenhouse gases endanger public health or welfare, which EPA did find.

¹³ EPA-420-F-09-028

able to build a single light-duty national fleet that satisfies all requirements under both programs while ensuring that consumers still have a full range of vehicle choices.”¹⁴

The agencies worked together to align their respective standards as much as possible, given their different statutory authorities. Given the unique authority and policy goals of the programs, it is made quite clear that at no point does compliance with one program guarantee compliance with the other—rather, a “harmonized” program means that manufacturers *will be able* to build a single fleet which can comply with the programs. Manufacturers are still capable of manufacturing a single fleet to comply with these programs—they simply are choosing not to.

b. It has been suggested that NHTSA’s fuel economy standards would be sufficient to achieve improvements in fuel economy, air quality, and reductions in greenhouse gas emissions if EPA’s and CARB’s standards were weakened or eliminated. Is this suggestions correct?

NHTSA’s authority under EPCA does not emphasize the reduction of greenhouse gases but simply the reduction of oil. As such, there are a number of flexibilities which NHTSA employs towards implementing its “maximum feasible” standards which are inconsistent with the goals of reducing greenhouse gas emissions.

For example, “alternative fuel” under EPCA includes fossil-based fuels such as natural gas, propane, and coal-derived liquid fuels—each of these fuels receives a bonus 0.15 multiplier such that CAFE calculates the energy efficiency of a vehicle driven using these fuels as nearly 7 times more than its actual efficiency, based on an outdated calculation from when E85 was the principle alternative fuel. While converting to natural gas may reduce petroleum usage, it has only a small benefit for emissions, especially when considering the full well-to-wheels emissions of a natural gas vehicle. And yet, under EPCA, these vehicles are heavily incentivized.

Another example of a flexibility which limits the ability of NHTSA to reduce greenhouse gas emissions is the CAFE penalty, which stands today frozen at just \$55 per mpg per vehicle, despite Congress’s requirement under the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015. Automakers have already been clear that they have planned their compliance strategy with CAFE acknowledging that they could owe billions of dollars in fines for non-compliance.¹⁵ The existence of the penalty sets a ceiling on the value of both credits and technology which a manufacturer would deploy,¹⁶ and that has been borne out. With automakers clearly stating that they are willing to pay fines in lieu of applying technology, and hundreds of millions of dollars in fines already paid confirming this choice, it seems clear that this penalty is not a significant and reliable deterrent. As such it seems dubious to suggest that a program with such a weak enforcement mechanism could reliably reduce emissions to the same degree as the Clean Air Act, for which the penalties for non-compliance are significantly higher and can result in an issuance of a stop-sale order, preventing a manufacturer from even selling its vehicles in the United States.

¹⁴ Federal Register 75 (88), May 7 2010, p. 25324.

¹⁵ “Harmonization of Fuel Economy Regulations – FAQ,” Alliance of Automobile Manufacturers.

¹⁶ “New Markets for Credit Trading under US Automobile Greenhouse Gas and Fuel Economy Standards,” Benjamin Leard and Virginia McConnell, Resources for the Future, May 4, 2017.

Additionally, roughly 10 percent of the greenhouse gas emissions benefits of the current vehicle standards come from the direct reduction in emissions from the air-conditioning system. NHTSA has no authority to reduce such direct emissions from refrigerants with high global warming potential.

4. **At our hearing on December 12, it was suggested that there is broad and strong support from environmental experts for "harmonization" of emission and fuel economy standards, quoting former EPA Administrator Carol Browner as an example, among others. Immediately after the hearing, however, Ms. Browner issued a strong statement denouncing those suggestions. Ms. Browner's statement clarified that she opposes any legislation that weakens standards regarding fuel economy or pollution reduction (see attached). Can you comment on the mischaracterization of Ms. Browner's position and, as an environmental expert, clarify what is the position of the environmental community regarding the need for "harmonization"?**

The statements put up on the screen at the beginning of the hearing were meant to muddy the waters by taking the quotes that groups and individuals said previously about the standards out of context. Many of the quotes that were included on that slide were in response to the success that the federal agencies and the California Air Resources Board have had in setting up One National Program. However, applying these quotes to a situation where the underlying standards are being altered (for instance through legislation that would effectively reduce the stringency of the standards for MY2017-2021 that were finalized in 2012) is a misuse and mischaracterization of the statements, which is presumably why Ms. Browner came out with such a forceful rebuttal to this tactic:

"I strongly oppose the Fuel Economy Harmonization Act and any other legislation that would weaken standards that improve fuel efficiency and reduce dangerous pollution from vehicles—implying otherwise is misleading and dishonest. America's clean car standards have dramatically improved the fuel efficiency of vehicles, saving consumers billions of dollars and cutting pollution in the process. Instead of rolling back commonsense, successful and popular clean cars standards, we should focus on innovation and technology that will continue the auto industry's growth and the pollution reductions we've achieved since these standards were first established."¹⁷

This sentiment is echoed by other groups as well—any move to undermine the stringency and integrity of the standards is opposed by the entire NGO community that supports these standards.

As noted in other answers, the standards are sufficiently harmonized and the assertion that the standards are not working is just another example of automakers trying to get out of doing the right thing and going backwards on their promise to drivers across the country, who favor increased fuel efficiency, by wide margins.¹⁸

¹⁷ Statement of Carol Browner, December 12, 2017. Online at www.lcv.org/article/carol-browner-corrects-record-dishonest-auto-alliance-statement-house-energy-commerce-committee/.

¹⁸ E.g., Consumers Union survey 2017 (<http://consumersunion.org/news/2017-fuel-economy-survey/>), Consumer Federation of America survey 2017 (https://consumerfed.org/press_release/new-poll-americans-care-fuel-economy-support-stronger-fuel-economy-standards/), and data presented by Mitch Bainwol, CEO of the Alliance of Automobile Manufacturers, at the SAE Government and Industry Meeting, Washington, DC, January 24, 2018.

5. Questions have been raised as to whether light-weighting vehicles makes them less safe or has even led to higher crash fatality rates. But don't all vehicles still have to meet the same safety standards established by NHTSA? Is there any evidence that light-weighting or other measures that improve vehicle fuel economy have made vehicles less safe or led to higher crash fatality rates?

All vehicles must meet the same NHTSA safety standards, and many of the materials used by manufacturers to reduce weight were actually first deployed to improve safety. For example, high-strength steels which are stiffer can help better protect passengers are used for critical crash zones.¹⁹ There are numerous reasons why manufacturers are moving to incorporate more advanced materials, as framed by the National Academies:

“Automakers are in general agreement that a closer-to-optimal vehicle design is coming, and it will include a more diverse mix of materials This is referred to as the mixed-material car, and the trend today is along this pathway. The mixed-material car will not be less crashworthy, and it will be better engineered for mass and performance.”²⁰

Vehicles like the aluminum-bodied F-150 are evidence of how manufacturers can provide increased performance, increased safety, and increased fuel economy all at once by taking advantage of lightweight materials: the redesigned truck not only uses less fuel than its predecessor, but it received higher crash ratings and saw increases in both payload and towing capacity as a direct result of taking weight out of the vehicle.

Reducing weight from vehicles like the F-150 provide a direct social benefit, as well. Detailed statistical analysis shows quite clearly the net social benefit of reducing weight of the largest vehicles, even for the most significant reductions.²¹ The fact that automakers across the industry are deploying lighter, stronger materials helps reduce the kinetic energy involved in any vehicle-to-vehicle crashes, and these materials can absorb energy better and provide better passenger protection through improved design.

Moreover, the footprint-based standards themselves were explicitly designed to ensure that the “crush distance” around the passenger is not reduced because it is vehicle *footprint*, not mass, which is more critical to the safety of the passenger.²² These standards were explicitly designed with safety in mind, so it would be incorrect to assert that the current efforts to improve vehicle fuel economy have made vehicles less safe or led to higher crash fatality rates. In fact, the relationship between reducing mass and increased fatality risk is statistically indistinguishable from zero.²³

¹⁹ 2015 National Academies report

²⁰ 2015 National Academies report.

²¹ Draft TAR, Chapter 8.

²² “Assessment of NHTSA’s report ‘Relationships between fatality risk, mass, and footprint in model year 2000-2007 passenger cars and LTVs,” Tom Wenzel, 2012. Prepared for the Office of Energy Efficiency and Renewable Energy, US Department of Energy. LBNL-5697-E.

²³ “Comments on Docket No. NHTSA-2016-0068 and Docket ID No. EPA-HQ-OAR-2015-0827,” Tom Wenzel, 2016. EPA-HQ-OAR-2015-0827-5738.

6. There have been suggestions that the cost of these standards are born by consumers. Some have stated that compliance with fuel economy and emissions standards from NHTSA, EPA, and CARB raises the price of a new car by an estimated \$3,000.

a. What is the source of this estimate, and is it an accurate one? [DC]

This value represents the sum total of the MY2011 CAFE and MY2012-2025 EPA and CAFE standards, based on the agencies' estimated costs of technology needed to be deployed to comply with the standards at the time of finalization of the regulations, compared to a 2008 vehicle. This is a reasonable, but likely overestimated cost of compliance with the entire federal program from 2008 to 2025. It also completely ignores the fuel savings associated with adding efficient technologies. The average new car in 2008 achieved 21 mpg, on-road—by 2025, this will rise to 36 mpg under these standards, cutting fuel costs by more than 40 percent. Over the lifetime of these vehicles, that means more than 4,000 fewer gallons of gasoline consumed, which translates into nearly \$9,000 in fuel savings for the vehicle owner, even after discounting future savings, netting nearly \$6,000 for the average consumer even after considering potential technology costs.²⁴

The cost presented by NADA also does not reflect the most up-to-date analysis of the costs of compliance or the latest technologies, which generally shows that technology costs are coming down. For example, in the Draft TAR EPA and NHTSA noted that "a wider range of technologies exist for manufacturer to use to meet the MY2022-2025 standards, and at costs that are similar or lower than those projected in the 2012 rule."²⁵ In its Final Determination, EPA showed that costs were further reduced from the TAR based on more comprehensive study of the latest technologies available.²⁶ Analysis of from the International Council on Clean Transportation shows even further reduced estimated compliance costs, based in part on a series of whitepapers with suppliers who manufacture the very technologies used to reduce fuel use and emissions.²⁷

To date, manufacturers have deployed enough technology to comply with EPA standards through MY2019, with compliance costs below those original estimates.²⁸ This retrospective analysis is consistent with previous studies on the costs to comply with regulation, which generally show that 1) industry far overestimates the costs of compliance and 2) agency estimates are closer but also generally overestimate the costs.²⁹

All of this is to say that while the estimate of \$3000 for the total technology cost to comply with the federal regulations may be a reasonable one: 1) it is likely an overestimate; 2) nearly half of those technology costs have already been incurred, so it would be disingenuous to assert this as the cost of

²⁴ "Fuel economy and emissions standards for cars and trucks, MY2017-2025," UCS. ucsusa.org/midtermreview

²⁵ Draft TAR, p. ES-2.

²⁶ EPA-410-R-17-001, p. 20.

²⁷ ICCT efficiency technology and cost assessment for U.S. 2025-2030 light-duty vehicles.

²⁸ "Comments concerning the reconsideration of the final determination of the mid-term evaluation of greenhouse gas emissions standards for model year 2022-2025 light-duty vehicles and the appropriateness of model year 2021 greenhouse gas emissions standards," David W. Cooke, Union of Concerned Scientists, 2017. EPA-HQ-OAR-2015-0827-9200, pp. 10-13.

²⁹ "Methods of estimating the total cost of federal regulation," M.P. Carey, Congressional Research Service, 2016; "On the accuracy of regulatory cost estimates," W. Harrington, R.D. Morganstern, and P. Nelson, Resources for the Future, 1999; "Innovation and regulation in the automobile sector: Lessons learned and implications for California's CO₂ standards," R. Hwang and M. Peak, 2006.

the rules moving forward; and 3) it completely ignores the fuel savings reaped by consumers as a result of these technology costs, to the tune of nearly \$9,000.

b. How much money have consumers in the U.S. saved as a result of improved fuel economy standards, and how do local communities benefit from these savings?

Thanks to strong fuel economy and emission standards, consumers are already saving nearly \$60 million each day in fuel costs -- that's about \$55 billion to date, savings that are reinvested in the local economy.³⁰ And that number will keep on ticking upwards with each new vehicle purchase, since the cars and trucks available today continue to improve in efficiency each and every year.

Using less gasoline puts more of the nation's household income to work, and lowering fuel costs for consumers means that any future price increases would affect a smaller share of household spending. Those financial savings translate into economic growth. The standards will increase GDP by up to \$30 billion by 2030, creating 650,000 full-time jobs.³¹

UCS analyzed these benefits for each of the 50 states and Washington, D.C and found that:

- The average household has already pocketed about \$250 in fuel savings thanks to these rules.³²
- As long as policymakers don't weaken these protections, the average household will net nearly \$2800 in savings by 2030, even after considering technology costs.³²
- Despite regional differences due to population density, vehicle mix, and gas prices, all states come out ahead thanks to strong standards.³²
- The standards are saving money for families across the nation—and when those savings are pumped back into the local economy, they drive growth and put people to work.

c. You wrote in your testimony that improving the efficiency of new vehicles is especially important for lower- and middle-class families, as well as for people in rural areas. Please expand on that concept. Improved fuel efficiency in a vehicle results in lower lifetime operating costs of the vehicle for the consumer. Are there any other vehicle improvements that provide a similar direct payback to the consumer?

Improving the efficiency of new vehicles benefits all drivers, but it is especially critical for lower- and middle-class families and rural drivers, who spend a greater share of their income on transportation.³³

³⁰ Net fuel savings relative to a 2010 baseline. See "Economic savings from fuel economy standards," Union of Concerned Scientists (2017). Online at <https://www.ucsusa.org/clean-vehicles/fuel-economy-ticker>.

³¹ "Fuel economy and emissions standards for cars and trucks, Model Years 2017 to 2025," Union of Concerned Scientists, 2016. Online at <http://www.ucsusa.org/sites/default/files/attach/2016/06/Fuel-Economy-Standards-2017-2025-summary.pdf>.

³² "State benefits of vehicle efficiency standards," Union of Concerned Scientists, 2017. Online at <https://www.ucsusa.org/state-benefits-vehicle-efficiency-standard>

³³ "The impact of increased fuel economy for light-duty vehicles on the distribution of income in the U.S.: A retrospective and prospective analysis," D. Greene and J. Welch, 2017. Knoxville, TN: Howard Baker Center for Public Policy. Online at <http://bakercenter.utk.edu/white-paper-on-the-impact-of-increased-fuel-economy-for-light-duty-vehicles>.

Transportation represents the second largest expense for many Americans.³⁴ The average middle-income household devotes almost 20 percent of its income to transportation.³⁵ Over one-quarter of that goes to gasoline and motor oil.³⁶ For low-income households, transportation consumes about 30 percent of total income.³⁷ These households typically spend more on fuel than on vehicle purchases, so any money saved on fuel has added impact on their budgets.³⁸

As sprawl has worsened and access to affordable housing in cities or near transit hubs has decreased, affordable and efficient transportation options have become less likely to serve low-income communities. As a result, many low-income households have placed a greater reliance on personal vehicles as their primary mode of transport.

Rural Americans tend to travel farther to access jobs and services than do city dwellers, making them typically more dependent on personal vehicles. At the same time, lower population densities in rural areas make it more challenging to deploy many transportation options that are relatively common in cities, such as public transportation or bicycling infrastructure. In a survey by the American Public Transportation Association, only 11 percent of rural respondents had public transportation available to their homes, compared with 83 percent in central cities.³⁹ Relative to urban households, rural households tend to own more vehicles and, as a result, spend more of their total income on vehicle purchases, gasoline and motor oil, insurance, and vehicle maintenance.⁴⁰ Providing both rural and urban low-income communities with better transit options and with vehicles that cost less to fuel can help make transportation more affordable and its costs more predictable, protecting drivers from oil price swings.

According to a detailed analysis of Consumer Expenditure Surveys, improvements in fuel efficiency save money for all income groups in America.³⁸ Low- to middle-income households saved up to an average of 2 percent of their income from 1980 to 2014. The nation's highest earners saved as well, although at a lower level: about an average of 0.5 percent of income across the years of the study.³⁸

A 2 percent savings on income is significant for millions of American households. For example, fuel-efficient vehicles saved an average middle-income household as much as \$17,000 from 1980 to 2014, providing money that could be used for other essentials, from food and clothing to education, health care, and family savings.³⁸

³⁴ "Consumer expenditures—2015," Bureau of Labor Statistics (BLS), 2015. Online at www.bls.gov/news.release/cesan.nr0.htm.

³⁵ "Where does all the money go: Shifts in households spending over the past 30 years," D.W. Schanzenbach, R. Nunn, L. Bauer, and M. Mumford. Online at www.hamiltonproject.org/assets/files/where_does_all_the_money_go.pdf.

³⁶ "Household spending on transportation," Bureau of Transportation Statistics (BTS), 2016. Online at www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/Transportation_Economic_Trends_2016_Chapter_6.pdf.

³⁷ "Housing & transportation cost trade-offs and burdens of working households in 28 metros," P. Haas, C. Makarewicz, A. Benedict, T. Sanchez, and C. Dawkins, 2006. Online at www2.nhc.org/media/documents/chp-pub-hl06-cnt-report.pdf.

³⁸ Greene and Welch 2017.

³⁹ "Rural communities, expanding horizons," American Public Transportation Association (APTA). Online at www.apta.com/resources/reportsandpublications/Documents/Rural-CommunitiesAPTA-White-Paper.pdf.

⁴⁰ "Urban and rural household spending in 2015," Bureau of Labor Statistics (BLS), 2016. Online at www.bls.gov/opub/ted/2016/urbanand-rural-household-spending-in-2015.htm.

d. After adjusting for inflation, are entry-level vehicles more expensive than they were before the current fuel economy standards were put in place?

Vehicle efficiency standards keep vehicles affordable. Though increasing vehicle efficiency comes at a modest cost, a recent report analyzing 20 years of consumer spending data concluded that the cost of the most affordable vehicles has remained effectively constant over the past decade even though today's vehicles are more efficient and cheaper to drive.⁴¹

For example, the report notes that the top-selling affordable new vehicles in 2015 actually cost almost the same as those marketed in 2005 (the 2015 Chevrolet Cruze L Manual sold for \$16,170; in 2005, a new Honda Civic DX sold for \$16,177 in 2015 dollars).⁴¹ At the same time, wages have stagnated and gasoline prices have risen faster than the Consumer Price Index.⁴¹ Fuel economy is more important than ever for working families.

e. Some have suggested that the increased cost of larger cars and SUVs over the last several years is because of the fuel economy standards, while others attribute those increased costs to extra features added on by the manufacturers such as heated seats. Are fuel economy standards the primary reason that large cars and SUVs are costing more?

In examining the increase in car prices since 2008, most of the observed increase is *not* attributable to technology that increases fuel economy. While the average cost of a new car has increased by over \$7,000 since 2008, the vast majority of that (\$4,300) is simply due to inflation, which affects every good in the U.S.⁴² The next largest factor is the increasing share of light trucks, which generally have a higher price tag—that amounts to another \$1,600 of the difference in price. That leaves \$1,300 for everything else, not just fuel economy technologies but also options like increased connectivity features, luxury trim packages, etc. Thus, efficiency technology costs are either being overestimated, or not being fully passed on to consumers—either way, fuel economy standards are not the primary driver.

When looking within a class of vehicles, we are seeing that manufacturers are selling a greater share of higher-trim packages.⁴² That means more luxury content and greater profit margins for automakers. It also means that automakers are increasingly targeting more affluent buyers—households that purchase SUVs have a median income more than \$15,000 higher than those who purchase cars,⁴² and automakers have been cranking out new products in this segment to attract those buyers. While entry level cars continue to be available and have not seen a price increase beyond inflation, automakers' targeted efforts to woo more affluent buyers to its higher profit, higher-trimmed light trucks have been the primary driver increasing vehicle price, not vehicle standards.

⁴¹ "More mileage for your money: Fuel economy increases while vehicle prices remain stable," T. Comings and A. Allison, 2017. Online at <http://consumersunion.org/wp-content/uploads/2017/03/Synapse-CU-Affordability-Report-3-15-corrected-1.pdf>.

⁴² "Affordability of vehicles under the current national program in 2022-2025 for Detroit Three automakers," Alan Baum and Dan Luria, 2016. Ceres Analyst Brief. Online at <https://www.ceres.org/resources/reports/affordability-vehicles-under-current-national-program-2022-2025-detroit-three>.

7. How have fuel economy standards driven technological innovation by automakers, as well as suppliers, and created good-paying jobs?

The fuel economy and greenhouse gas standards have helped drive American investment in manufacturing by providing certainty for the industry out through 2025. Suppliers have invested nearly \$50 billion building and expanding factories in the U.S. over the past decade,⁴³ and that's a direct result of the certainty these standards provide. Supplier manufacturing jobs outnumber automaker jobs by 3 to 1 and have been a tremendous source of job growth for the manufacturing sector. These jobs have grown by 20 percent since these standards were finalized,⁴⁴ and 288,000 (about half) of the supplier manufacturing jobs are directly related to the manufacture of parts to improve fuel efficiency,⁴⁵ not to mention the indirect jobs impacted by this local investment. Anything done to weaken the standards and undermine that investment could have drastic consequences for a supplier base with a broad national footprint, with facilities in 48 states and at least 335 Congressional districts.⁴⁶

Enhanced investment to develop, manufacture and incorporate added technology necessary to improve fuel efficiency means added jobs. Studies consistently predict 50,000-100,000 additional manufacturing jobs by 2025-30—above and beyond business as usual industry investments or employment levels—as a result of investment and innovation to meet the standard.⁴⁷

In addition to ensuring drivers of all types of vehicles see fuel savings, today's footprint based standards have meant innovative technology investment across the industry. Achieving big fuel efficiency gains in the Ford F-150 or Chevy Silverado, for example, have meant re-investment and job growth not only at assembly plants, but at components and materials companies across the country.⁴⁸

The auto industry is healthier than ever, and its recovery has been concurrent with ambitious fuel efficiency standards.

8. At the moment, gas prices in the United States are low. Are you concerned that if the U.S. government and automakers back away from their commitments to fuel efficiency, consumers could be hurt by the lack of fuel-efficient options if gas prices rise again? Why?

Weakening the standards because of low gas prices would cost drivers both now and in the future.

In 2012, when the Obama administration finalized strong standards for fuel economy and global warming emissions for passenger vehicles for 2025, oil prices topped \$100 per barrel and gasoline prices

⁴³ "Suppliers' \$48 billion spending spree," D. Sedgwick, Automotive News, August 1, 2016. Online at www.autonews.com/article/20160801/OEM10/308019948/suppliers-%2448-billion-spending-spre.

⁴⁴ "Automotive Industry: Employment, earnings, and hours," Bureau of Labor Statistics (BLS). Online at www.bls.gov/iag/tgs/iagauto.htm.

⁴⁵ "Supplying Ingenuity II: U.S. suppliers of key clean, fuel-efficient vehicle technologies," Blue-Green Alliance and the Natural Resources Defense Council, 2017.

⁴⁶ Interactive map available at www.bgafoundation.org/programs/visualizing-the-clean-economy-autos/

⁴⁷ Regulatory Impact Analysis, Environmental Protection Agency (EPA), 2012; "Driving Growth," Center for American Progress, Natural Resources Defense Council (NRDC), and United Autoworkers (UAW), 2010. Online at <http://drivinggrowth.org/driving-growth-report/>.

⁴⁸ "Combating climate change 436,000 pickup trucks at a time," BlueGreen Alliance Issue Brief, 2016. Online at www.bluegreenalliance.org/resources/combating-climate-change-426000-pickup-trucks-at-a-time/

averaged nearly \$4 per gallon. Even with these prices cut nearly in half now, strong standards extending out to 2025 put the auto industry and its customers on a more sustainable course.

Fuel economy standards reduce fuel costs to consumers by ensuring they have more choices of efficient vehicles, from sedans to SUVs and pickup trucks. Even at today's historically low gas prices, the average car buyer actually saves money as soon as he or she drives off the lot.⁴⁹ The last time prices spiked in the early 2000's, US automakers were headed toward bankruptcy, with a lack of efficient options for consumers and plummeting sales of high-margin SUVs.⁵⁰ American households shelled out \$2,600 a year for fuel even as their taxes were bailing out General Motors and Chrysler.⁵¹ Given the immense fluctuations since the 1970s, it is more prudent to minimize their impacts rather than assume prices will remain at today's historic lows.

9. Please describe how credits help automakers comply with emissions and fuel economy standards. If automakers are given full, retroactive expansion of credits they are asking for, how long could they continue to technically comply with the current standards by just transferring or cashing in credits without needing to make any further improvement in fuel economy?

The averaging, banking, and trading program is meant to allow manufacturers to smooth out their compliance—product cycles are about five years long, so over a typical vehicle's lifetime it will generally earn credits for overcompliance in the first few years after it is redesigned, and then draw down that credit bank over time. Credits are not, in and of themselves, meant to be a compliance mechanism—they are not spawned out of thin air, nor should they be earned without commensurate reductions.

The standards are generated based on specific criteria for earning credits—suddenly changing those rules in the middle of the program directly results in weakening the standards. NHTSA lays this out quite clearly in the 2012-2016 regulations:

“NHTSA has determined that the current CAFE levels being finalized today are feasible using traditional ‘tailpipe technologies’ alone. If manufacturers are capable of improving fuel economy beyond that level . . . and wish to receive credit for doing so, then NHTSA believes that more stringent CAFE standards would need to be established. Not raising CAFE could allow manufacturers to leave tailpipe technology on the table . . . which would not result in the maximum feasible fuel savings contemplated by EPCA.”⁵²

The impact of granting off-cycle credits for the 2012-2016 CAFE program would result in a windfall for manufacturers and would not result in the maximum feasible fuel savings required under EPCA.

Our analysis of the credits granted under H.R. 4011 shows that the credits and credit flexibilities granted under the bill exceed the differences between the EPA and CAFE programs resulting from different statutory requirements. In total, the bill results in a glut of credits equal to nearly 700 million barrels of

⁴⁹ “Fueling savings: Higher fuel economy standards result in big savings for consumers,” A. Comings, A. Allison and F. Ackerman, 2016. Online at consumersunion.org/wp-content/uploads/2016/09/Fueling-Saving-Consumer-Savings-from-CAFE-2025.pdf.

⁵⁰ “Seven reasons GM is headed to bankruptcy,” S.S. Carty, USA Today, May 31, 2009.

⁵¹ “National Strategy for Energy Security: The Innovation Revolution,” Securing America's Future Energy (SAFE), 2016. Online at <http://secureenergy.org/report/national-strategy-for-energy-security-the-innovation-revolution/>

⁵² Federal Register 75 (88), May 7 2010, p. 25663.

oil; however, as long as EPA's regulations are not weakened, the progress needed to meet that standard will forestall full utilization of this windfall in credits.

By increasing the transfer cap, automakers can use this windfall of credits to offset improvements in entire segments, potentially undermining continued across-the-board improvements in efficiency. For example, a transfer cap of 6 mpg is so large that it is equivalent to the entire projected improvement for pick-up trucks from 2016-2022—the bill would now allow such improvements to be accommodated entirely by credits instead of technology, limiting consumer choice in this segment.

If the bill is passed, manufacturers will be able to continue to drag their heels, slow walking progress at the same rate they have been on for the past decade, resulting in a fleet in 2021 that is about 3 mpg less efficient than required today. If the bill were enacted in full force and the standards weakened under the mid-term review, the industry would be on course to fall 8 to 10 mpg short of today's 2025 standards.

10. Is it true that California tried to ban black cars?

No, it is not true that California tried to ban black cars. Under the "Cool Cars" regulation,⁵³ the California Air Resources Board sought to reduce the amount of solar energy entering the passenger cabin—this, in turn, reduces the energy load on climate control systems and can thus save energy and reduce emissions. The two main ways in which this is accomplished are by increasing the solar reflectivity of glass (typically through glazing) and by increasing the solar reflectivity of paint.

Contrary to what Mr. McConnell stated in the hearing, any color car can be made more reflective, including black—most of the sun's energy is not in visible wavelengths. Just like suntan lotion can block the sun's rays without changing your skin color, a car's paint coating can be made to reflect more of the energy in the non-visible spectrum to reduce the temperature of your car as it sits in the sun, regardless of the color of the vehicle.⁵⁴

While California's "Cooler Cars" program ended up being eliminated, the federal fuel economy and greenhouse gas emissions standards currently issue off-cycle credit for the exact same technologies covered under the legislation as part of the standard off-cycle credit "menu" ("thermal technologies" includes glazing and solar-reflective coatings).

11. Do you believe that the midterm evaluation should consider the effect of high octane blends on compliance with the standards? Why or why not?

While higher octane gasoline can improve the efficiency of turbocharged and high-compression ratio engines,⁵⁵ the availability of such a fuel is by no means a certainty. Crediting manufacturers based on

⁵³ For details of the program initiated under AB 32, see www.arb.ca.gov/cc/cool-cars/cool-cars.htm.

⁵⁴ "Vehicle paint radiation properties and affect on vehicle soak temperature, climate control system load, and fuel economy," Paul B. Hoke and Christopher M. Greiner, Ford, 2005 Society for Automotive Engineers' World Congress, April 11-14. Paper No. 2005-01-1880.

⁵⁵ "Co-Optimization of Fuels & Engines: FY16 Year in Review," National Renewable Energy Laboratory and Sandia National Laboratories, Department of Energy (DOE). 2017.

the promise of the use of a fuel rather than evidence of such use is exactly the mistake which manufacturers exploited under the flex-fuel vehicle (FFV) loophole, and we do not think repeating such an error is prudent or necessary.

Blends of gasoline with 25 percent ethanol have the potential to offer reduced carbon pollution and per gallon fuel prices without a loss in miles per gallon using engine technology that is increasingly prevalent.⁵⁶ However, realization of this technical potential requires a practical plan to coordinate the introduction of the new fuel and vehicles designed to use it. Such a plan needs to address demand (e.g. vehicles compatible with or optimized for high-octane E25), fuel distribution infrastructure, regulatory issues, and supply (e.g. availability of sufficient low carbon ethanol and appropriate gasoline blend-stocks). While much of the necessary technical basis for such a plan exists, there is still considerable work required to make specific decisions, move these through several relevant regulatory processes and allow market participants (vehicle makers, fuel producers, and fuel distributors and retailers) time to adapt to the new fuel.

An orderly transition to high-octane fuel would take several years to complete. It will take time for the necessary regulations to be finalized, for vehicles optimized for high-octane gasoline to come to market and to build out the fuel distribution infrastructure to make this fuel broadly available. And even once high-octane gasoline is in use, it will take more time for automakers to phase-in new models optimized for high-octane fuel and to fully replace the legacy E10 fleet. Another factor to consider is that the rising share of high-octane gasoline will be buffered by falling sales of gasoline, given increasing fuel efficiency, such that the overall demand for ethanol will change more slowly.

Our expectation is that high-octane gasoline will not significantly enter commerce before 2026, and subsequently would only gradually gain market share through 2040 (though this is by no means a certainty). There is no realistic prospect of completing this process before 2025, in the timeframe of the mid-term evaluation. The appropriate context for this discussion within vehicle rules is the next round of fuel economy standards, beginning in 2026. Even then, an expeditious rulemaking process will be required to achieve adequate regulatory clarity to facilitate rapid adoption post-2026.

We strongly oppose granting fuel economy credits based on the technical potential of vehicles to operate on high-octane fuel before there is clear evidence that high-octane fuel is in use and the potential fuel economy benefits are being realized on the road. The history of the CAFE flex-fuel vehicle (FFV) program provides clear evidence that credits given based on unrealized potential and in advance of adequate fuel distribution infrastructure are counterproductive. Recent analysis demonstrates that the FFV program actually increased gasoline consumption and emissions without substantially increasing the use of alternative fuels.⁵⁷ There is no doubt that repeating such an historical error by prematurely crediting manufacturers based on the promise of alternative fuel use would lead to the same result.

⁵⁶ "The Road to High Octane Fuels," Jeremy Martin, 2016. Online at blog.ucsusa.org/jeremy-martin/the-road-to-high-octane-fuels.

⁵⁷ "Alternative fuel vehicle adoption increases fleet gasoline consumption and greenhouse gas emissions under United States corporate average fuel economy policy and greenhouse gas emissions standards," A. Jenn, I.L. Azevedo, and J.J. Michalek, *Environmental Science & Technology*, v.50 (5) p.2165-2174 (2016).

12. Some have requested that automakers receive various credits toward fuel economy standards. If Congress allowed such credits, would that have any effect on greenhouse gas emissions?

Senator Roy Blunt (R-Missouri) and Representative Fred Upton (R-Michigan) have introduced corporate welfare bills that would give automakers free credits which they can use to significantly slow their progress on making cars more fuel efficient into the future. The bills undermine the federal fuel economy regulations in three ways: 1) it extends the life of CAFE credits, some of which have already expired, creating so-called “zombie credits”; 2) it awards a credit windfall for vehicles already sold by retroactively granting credits under the off-cycle program which regulators explicitly said they were not granting when setting the stringency of the program; and 3) it allows for manufacturers to focus all their efforts on just one segment of their fleet, undermining the promise to consumers that all types of vehicles—cars, trucks, and SUVs—would become more efficient over time.

The credit life extension provision of this legislation alone would increase oil use by 350 million barrels of oil, increase global warming emissions by 155 million metric tons, and take money (\$34 billion!) directly out of American families’ wallets rather than helping drivers further on a gallon of gas, something roughly 80 percent of Americans want to automakers to do. Moreover, 30 percent⁵⁸ of the 2010 and 2011 credits which have already expired were generated by flex-fuel vehicles—such credits were explicitly not allowed under EPA’s early credit program for those same model years, again emphasizing that this “harmonization” is really about windfall.⁵⁹

Retroactively granting off-cycle credits alone would result in 280 million barrels of oil to be consumed and 125 million metric tons of greenhouse gases to be emitted, if automakers were able to take full advantage of this provision of the bill. Automakers will not be able to access all of the credits granted under the bill unless the EPA’s greenhouse gas emission program is also weakened—the EPA program acts as a backstop, as compliance is mandatory. However, by putting the industry on a weaker course than required under today’s standards amid the ongoing mid-term review of the program, industry would be on a trajectory for up to an 8 to 10 mpg shortfall compared to the current 2025 standards.

Manufacturers have erroneously claimed that because EPA and NHTSA claimed the same amount of fuel savings in the 2017-2025 rule, that these rules cannot result in any loss of oil savings.⁶⁰ However, EPA did not attempt to quantify the impact of the flexibilities being requested in the current legislation by manufacturers. In the case of the “zombie credit” provision, EPA’s reasoning for excluding such impacts has proven particularly false—while in the final rulemaking they explained that “it would not change the overall CO₂ benefits of the National Program, as EPA does not expect that any of the credits at issue would otherwise have been allowed to expire,” history has shown a different story, with these credits allowed to expire under the CAFE program. Resurrecting the “zombie credits” in H.R. 4011 is quite explicitly doubling down on this error.

⁵⁸ Weighted by fuel savings, taken on net from the industry.

⁵⁹ Federal Register 75 (88), May 7 2010, p. 25340.

⁶⁰ E.g., the hearing testimony of Mitch Bainwol, Alliance of Automobile Manufacturers.

13. Do you have concerns with the Trump Administration's decision to place an indefinite delay of the civil penalty increases for CAFE violations that were finalized at the end of last year?

Delaying action on the civil penalty increase has encouraged manufacturers to pay lower fines instead of deploying new technologies. The civil penalty is so low that it is more economically sensible to pay the fine than to deploy many of the technologies needed to reduce fuel use from passenger vehicles.⁶¹ The literature clearly shows that increasingly stringent CAFE standards require increasingly stringent penalties, or manufacturers will simply pay fines for non-compliance.⁶² And we have already seen that the current level of fine is not an adequate deterrent for the current standards—manufacturers stand today ready to pay billions in fines as part of a strategy of non-compliance with the CAFE targets.⁶³

The GAO long ago recommended that NHTSA increase the fine with respect to inflation.⁶⁴ This was the recommendation of a National Academies panel as well.⁶⁵ And Congress explicitly required that fines be adjusted to inflation, barring adverse economic impacts.⁶⁶ It is clear that the only adverse economic impacts from increasing fines are felt by the consumers deprived of more efficient vehicles.⁶⁷ It's long past time to raise the price of violating CAFE regulations.

14. We've heard complaints that the goalposts for compliance were moved in the midterm review. My understanding, though, is that the midterm review simply confirmed that standards set in 2012 were still achievable. Did the midterm review do anything to make compliance more difficult?

The midterm review completed in January 2017 with former EPA Administrator Gina McCarthy's affirmative final determination reflected the facts: the standards are feasible, they're working to improve efficiency vehicle by vehicle, and there's no need to weaken them or undermine them with loopholes. The joint EPA/NHTSA/CARB Technical Assessment Report (TAR) concluded that we could continue to go further in improving efficiency, and highlighted technologies in use that weren't even anticipated when the standards were designed in 2012.⁶⁸ If anything, the TAR showed that the standards could even be strengthened. However, former EPA administrator McCarthy decided to maintain the standards to ensure industry certainty.

The midterm evaluation upheld the standards that were already on the books, standards which manufacturers presumably were planning to meet—affirming the status quo certainly did not make compliance more difficult, and no changes have been made to the program since the rules were finalized in 2012.

⁶¹ "Re: Reconsideration of final CAFE penalty rule," Luke Tonachel (NRDC). NHTSA-2017-0059-0011.

⁶² "A Structural Analysis of Vehicle Design Responses to Corporate Average Fuel Economy Policy," Ching-Shin Shiao, Jeremy J. Michalek, and Chris T. Hendrickson, *Transportation Research Part A: Policy and Practice* 43 (9): 814–28, 2009.

⁶³ "Harmonization of fuel economy regulations – FAQ," Alliance of Automobile Manufacturers.

⁶⁴ "Vehicle fuel economy: Reforming fuel economy standards could help reduce oil consumption by cars and light trucks, and other options could complement these standards," US GAO, August 2007. GAO-07-921.

⁶⁵ *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, 2002.

⁶⁶ Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (2015 Inflation Adjustment Act)

⁶⁷ "Response to Automaker Comments Regarding Raising CAFE Fines," Dave Cooke (UCS). NHTSA-2017-0059-0019.

⁶⁸ "Draft Technical Assessment Report: Midterm evaluation of light-duty vehicle greenhouse gas emission standards and corporate average fuel economy standards for model years 2022-2025," EPA, NHTSA, and CARB, 2016.